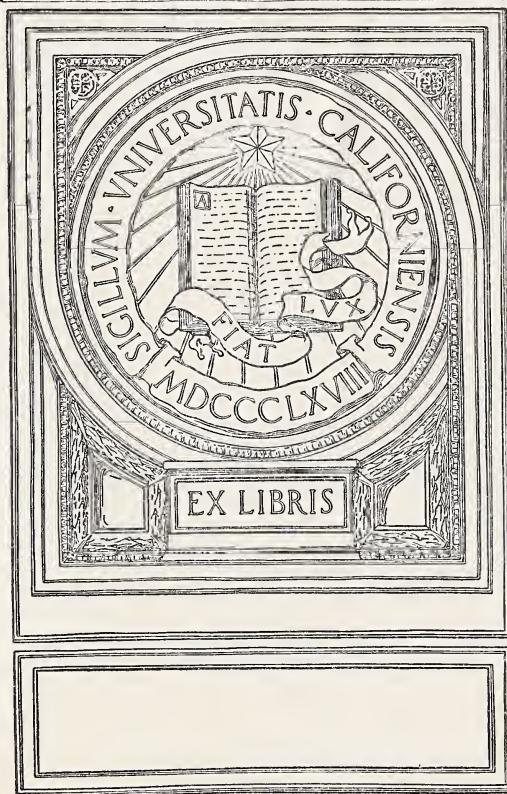
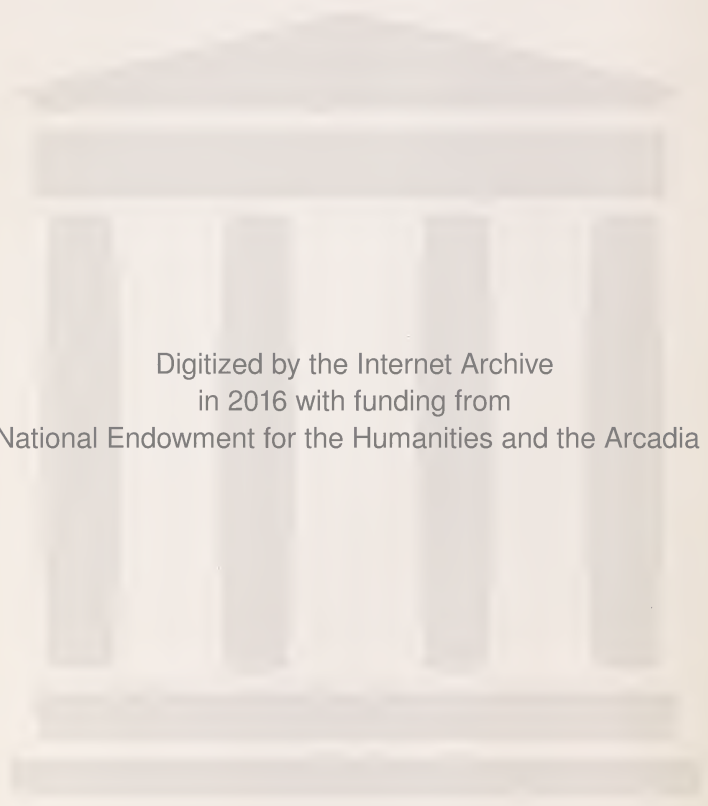


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VOL. LX.

JULY, 1907.

No. 1

Original Article.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a **WRITTEN** order for the same accompany the paper.)

Methods of Staining and Cultivating the Gonococcus.

By HENRY G. SPOONER, M. D., of Boston.

Like other bacteria, the gonococcus possesses a power of attraction for basic anilin colors, is readily stained by methylen blue, methyl violet, gentian violet, dahlia and fuchsin, but is decolorized with equal facility in alcohol and acids, according to Gram's staining. This ready decolorization is a negative, but valuable diagnostic sign, between the gonococcus and other forms of diplococci, which usually retain a once imbibed staining much more vigorously and are not decolorized, either by alcohol, or acids and particularly by Gram's method. Gram⁽¹⁾ (1884) found that preparations of schizomycetes, when placed in hydrochloric, or nitric acid alcohol were decolored, so that when they were afterwards treated with aqueous solutions of Bismarck-Brown, they had given up their blue color and became bright brown. Bumm⁽²⁾

(1885) observed that the gonococcus, when treated by Gram's method, yields its color much more quickly, than the cell elements, as did a series of other diplococci, similar to gonococci, so that he could not consider this characteristic of importance for differential diagnosis. On the contrary, Roux⁽³⁾ (November 8, 1886) recommended decolorization according to Gram for doubtful cases, for the purpose of differential diagnosis. His method of procedure was as follows: 1. Coloring with an anilin solution of methylen blue; 2, Action of the fluid of Gram (iodin 1 part, iodide of potassium 2 parts, water, 100 parts) during 3 to 4 minutes; 3, Decolorization by alcohol at 90°c; 4, After-staining with an aqueous solution of eosin.

After this series of operations that are not difficult to do, the ordinary microbes of suppuration remain blue upon a rose base, while the gonococci have taken a rose tint, a little more pronounced, than that of the anatomical elements. Allen⁽⁴⁾ (1887), Wendt⁽⁵⁾ (1887), advocated this method for differential diagnosis, as did Steinschneider and Galewsky (1889). The latter authors stained their cover-glass preparations, according to their modification of Gram's method, namely, laid them in anilin-gentian-violet (Koch-Ehrlich anilin water solution of gentian-violet is prepared as follows: To about 100 c. c. of distilled water, anilin oil is added, drop by drop, until it has an opaque appearance, the solution being thoroughly shaken after the addition of each drop. It is then filtered into a beaker through moistened filter-paper until the filtrate is perfectly clear. To 100 c. c. of the filtrate add 10 c. c. of absolute alcohol and 11 c. c. of the concentrated alcoholic solution of gentian-violet, or until a metallic lustre appears on the top of the solution) for twenty-five, or thirty minutes, rinsed, placed for five minutes in Gram's solution and then the preparations were laid in alcohol, until decolorization, until the fluid dropping from the glass, no longer showed a violet color. Then they were rinsed off, dried and colored afterwards with Bismarck-Brown. The gonococci then have a brown color, all other cocci are black from the combination of the gentian-violet and Bismarck-Brown staining. By this method Steinschneider and Galewsky recognized four kinds of diplococci in the normal urethra, as well as in the secretion of

gonorrhea. Their milk-white and orange yellow diplococci were not decolorized by Gram's method, whereas the gray-white and citron-yellow diplococci were decolorized by this method. As the gray-white diplococcus was found only once in the healthy urethra and the citron-yellow variety not at all, Gram's method gave very accurate results in ruling out any diplococci that may have been present in the normal urethra. Gonococci bore the relation of 4.65 per cent. to the diplococci which are decolorized by Gram, therefore the Gram-Roux method, to differentiate gonococci from other diplococci gave entirely sure results in 95.35 per cent. of the cases.

Hogge⁽⁶⁾ (1893) allowed the preparations of gonorrheal pus fully 25 to 30 seconds in anilin water gentian violet, that he made by addition of 10 parts of a 10 per cent. alcoholic gentian-violet solution to 100 parts of anilin water, treated even so long in iodine potassium iodide solution and then observed after 10 to 15 seconds of action of absolute alcohol, that the gonococci were entirely decolorized. The material used for after-staining was not mentioned. In two observations, a urethritis complicated by a double epididymitis, and one of cystitis, numerous diplococci were found whose form resembled that of the gonococcus, but he could not distinguish between them by his method of staining according to Gram.

Bröse⁽⁷⁾ (1893) energetically attacked the diagnostic value of microscopical examinations for gonococci, because these germs were absent in many cases, and also because they assumed involution forms. Witte⁽⁸⁾ (1893) came to analogous conclusions. Neisser⁽⁹⁾ (1885 and 1899) had also called attention to the fact that often secretions must be examined for months in order to find gonococci.

Touton⁽¹⁰⁾ (1894) claimed that many gonococci are not sufficiently or not at all decolorized by Gram's method. Caneva⁽¹¹⁾ (1894) is of the opinion that gonococci, according to Gram's method, are not decolorized in a certain absolute manner. However, Kral, (1894) under definite quantitative conditions with Gram's method, always obtained positive results.

Kiefer⁽¹²⁾ (1895) considered that the concentration of the staining solution had no influence on the prompt decolorization of

the gonococcus, but that rapid decolorization is hindered by too much anilin in the gentian-violet solution, therefore he used only a 2 per cent. anilin water. Van der Bergh⁽¹³⁾ (1896) called attention to the fact that the gonococcus situated intracellularly remained constant to Gram's coloring, if the preparations of gonorrheal pus were decolorized in absolute alcohol, not longer than 30 seconds, when the staining solution was not too weak. The same evident uncertainty of Gram's method has been determined by Nogues⁽¹⁴⁾ (1897). Weinrich⁽¹⁵⁾ (1898), upon the basis of his investigations came to the conclusion that the concentration of coloring material and the anilin contents of Ehrlich's gentian-violet solution were not what caused uncertain results of decolorization, but the rinsing of preparations with water, as well as the employment of dilute alcohol.

These different observations can only be explained by the different methods employed by the authors of performing Gram's method, as most of the authors have neglected to state how they have proceeded.

Gram (1884) gave seemingly wide boundaries in relation to the concentration of the color material and the duration of staining. For staining he took the customary Ehrlich's anilin-oil-gentian-violet solution, in which the preparations remained 1 to 3 minutes, then they were conveyed into an aqueous solution of Lugol's solution (iodin 1.0, potassium iodide 2.0, water 300.0), without, or after a slight rinsing with anilin water in which they remained 1 to 3 minutes, then the preparations were placed in absolute alcohol, until they were entirely decolorized, the alcohol being renewed once or twice. Ehrlich's article did not give the time of shaking 5 ccm. anilin oil with 100 ccm. of distilled water, although the solution must be affected by the length of time and the energy with which the shaking is done. Both of these factors must have an evident influence on the more or less complete blending of the anilin oil in the water. Even so the addition of color material to anilin water, until solution still remains transparent, must give occasion to very different quantitative relations between color material and anilin water, in the hands of different investigators, who use glass vessels of different diameters.

The decoloration of preparations in alcohol to entire decoloration is microscopically scarcely to be controlled.

From this brief review it follows that some authors, by the employment of the most different concentrations of color solutions, acting for different periods of time, always observe a prompt decolorization of the gonococcus, according to Gram's method, while other observers discover that the gonococcus sometimes, or under certain conditions, behaves irregularly, according to Gram, hence regardless of the numerous methods of staining the gonococcus according to Gram, the value of this method depends very much upon the technic of the examiner, as a little over-staining obliterates the diagnostic value of this method, so that for the average observer, staining the gonococcus with an aqueous solution of methylen blue suffices to make the diagnosis with as much certainty as the method of Gram.

After coloring of preparations decolorized by Gram's method, can easily occasion errors, inasmuch as an over-coloring can be caused easily. Fuchsin, safranin and eosin in solutions recommended by Roux overcolor so intensely that one, to be sure, must not let the coloring material act for more than 15 seconds at most, even if the coloring solution is as weak as possible. If the preparation is once overcolored so, the experienced observer will find it difficult to discover a differentiation in color, between the diplococci decolorized by Gram and the diplococci retaining the Gram's coloring. Such an over-coloring can often give the impression that there may have been a decolorization after Gram.

This difficulty has been mostly prevented by an after-staining with Bismarck-Brown, but this has also its drawbacks; it is sometimes not entirely clear and the preparations colored by it tire the eye after a long examination. Therefore, a long list of different coloring materials have been tried, to see if they were not better for the after-staining. They colored, as above related, too intensely, or they did not give any sufficient contrast. We must, therefore, still adhere to the Bismarck-Brown, which is best for the after-coloring for specimens treated by Gram's method.

Schürz⁽¹⁶⁾ (1889) recommends the following method for staining gonococci: The cover-glass with the clap pus is placed for 5 to 10 minutes in a cold, filtered, saturated solution of methylen blue in 5 per cent. carbolic acid water, then washes in distilled water and in dilute acetic acid (5 drops acetic acid dilute to

20 c. cm. distilled water) and then thorough rinsing in water. The gonococci remain blue, all other diplococci are decolorized. For after-staining a dilute aqueous solution of safranin is used, whereby the gonococci are blue, the epithelia pale blue and the pus cells and their nuclei have a salmon color.

The method of Schaffer⁽¹⁷⁾ (1895) gives beautiful pictures. The cover-glass smeared with gonorrheal pus is immersed for 5 to 10 seconds in a solution of fuchsin (fuchsin 0.1, alcohol 20.5%, carbolic solution ad 200), rinsed in water and then brought into ethylendiamin-methylen blue (2 to 3 drops of a 10% aqueous methylen blue solution to 10 cubic centimeters of a 1% ethylendiamin) until brought to an evident blue color, and then rinsed in water. As the protoplasm and nuclei are very slightly stained by this method, it is particularly serviceable for the detection of a very few gonococci. According to Lanz (1895) pretty pictures are to be obtained if the preparations are previously immersed in a 20% solution of trichloroacetic acid for a very short time.

Lanz⁽¹⁸⁾ (1899), likewise devised a double stain, as follows: The cover-glasses for $\frac{1}{4}$ to $\frac{1}{2}$ minute are brought into a mixture, that consists of 4 parts of a saturated aqueous solution of thionin and 1 part of a 2% aqueous carbolfuchsin solution, then washes it with water, to be dried and mounted. The gonococci then appear blue, the ground bright red, the protoplasm of a darker red, the nuclei blue red. This method gives very beautiful pictures. Equally beautiful pictures are obtained by the double coloring method of Pick⁽¹⁹⁾ and Jacobson (1896). The cover-glasses smeared with gonorrheal pus are placed for 8 to 10 seconds in a mixture that consists of distilled water 20.0; carbolfuchsin drops 15; concentrated alcoholic solution blue, drops 8, then rinsed in water, dried and mounted in Canada balsam. The bacteria appear deep blue, often with light red mixture. The cell protoplasm, mucus, necrotic cell elements, etc., are of a bright fuchsin color and the bodies of the epithelial cells glistening red. The solution is to be freshly prepared before using. Unna⁽²⁰⁾ (1899) used an alcoholic (acetic acid can be used instead of alcohol) $\frac{1}{2}$ to 1% solution of neutral red. A drop of gonorrheal pus is laid on the previously fixed object-glass and examined. Plato⁽²¹⁾ (1899) made analogous investigations at the same time and called attention to the

fact that gonococci first imbibe the color if fresh gonorrheal pus is stained with neutral red (1 c. m. cold saturated aqueous solution of neutral red to 100 ccm. physiological salt solution), when part of the intracellular gonococci are stained a light red. If a stronger solution of neutral red is used (20 c. m. of a cold saturated solution to 100 ccm. water) all the gonococci are colored a deep red in a few seconds, but the nuclei are only faintly colored.

Homberger⁽²²⁾ (1900) employed a 1:10,000 solution of real-Kresyl violet, a fluorescing, dichromatic color, made by Leonhardt, in Mühlheim. The gonococci were red violet, the nuclei a pale blue. Other bacteria should not be colored or only weakly so. V. Wahl⁽²³⁾ (1903) recommended the following formula: Concentrated alcoholic solution auranin 2 o. g.; spiritus (95%), 15 g.; concentrated alcoholic solution thionin 20 g.; concentrated aqueous solution methyl green 30 g.; aq. dest. 60 g. This stain can be recommended because: 1. The dark red violet to black colored gonococci can be clearly differentiated from their bright surroundings; 2. The other bacteria or cocci are not at all colored, or much less intensely so; 3. Ten to fifteen seconds are required for the staining and the examination of the preparation lasts at the longest five to ten minutes. The Pappenheim solution recommended by Kryszalowicz⁽²⁴⁾ and Unna (1903) gives very similar results and consists of: Methylene green 0.15, pyronin 0.25, alcohol 2.50, glycerin 20.0, 2% carbolic water to 100. The coloring material acts for 20 to 30 seconds and is rinsed off with water. The gonococci appear purple red, the protoplasm of the pus cells rose, their nuclei bright green, the epithelia dark rose, their nuclei blue violet. Leszynski⁽²⁵⁾ (1905) places the cover-glasses smeared with gonorrheal pus for 60 seconds into a solution of thionin (solution thionin 10 c. c.; aq. dest. 88 c. c.; acid phenic liquid 2 c. c. The preparation is washed with water and treated for 60 seconds by the solution (saturated aqueous solution of picric acid, aqueous solution of caustic potash 1/1000, each 50 c. c.) The cover-glass is then rinsed in alcohol for 5 seconds and after washing with water, is dried and mounted with Canada balsam. Preparations colored in this manner present the following characteristics: the protoplasm of the leucocytes is colored a pale yellow or citron yellow, the nuclei red violet, the protoplasm of the epithelial cells is colored

a clear yellow; their nuclei are clearer than those of the leucocytes. The gonococci remain black and this color permits of establishing differential diagnosis.

Vörner⁽²⁶⁾ (1899) recommends for staining sections a weak, freshly prepared solution of thionin. He obtained particularly good results, if he placed the section before coloring, for a short time, in dilute acetic acid. Asahara⁽²⁷⁾ (1899) stained sections for $2\frac{1}{2}$ to 3 hours in $\frac{1}{2}$ to 1% acetic water, then in water, brought it for 20 minutes into the incubator, until the sections were somewhat dried (in order to avoid a longer action of the alcohol), then into as weak a solution as possible of eosin in alcohol ($\frac{1}{2}$ minute), then a very short time in alcohol, bergamot oil. Zieler⁽²⁸⁾ (1903) stained his sections over night in the dilute solution of orcein given by V. Pranter⁽²⁹⁾: orcein D. (Grübler) 0.1, officinal nitric acid (gr. Ph.) 2.0; 70% alcohol 100.0, then rinsed in 70% alcohol (short time) to remove excess of orcein, then in water, colored in polychromous methylen blue 10 minutes to 2 hours, then into distilled water, thorough differentiation in the glycerin ether mixture (Grübler), rinsing in distilled water, then in alcohol 70%, absolute alcohol, xylol, balsam.

Finger⁽³⁰⁾ (1905) recommended for the staining of gonococci in sections borax-methylen-blue. The sections were immersed for two or three minutes into a 5% solution of borax-methylen-blue, were then rinsed in water, differentiated by a short immersion in $1\frac{1}{2}$ % acetic acid, came into absolute alcohol, until the section was decolorized to a green blue hue when it is then brightened and mounted.

In order to prove the specific character of the micrococci of Neisser it is necessary, not alone to demonstrate their constant occurrence in gonorrheal secretions, but also to make pure cultures and inoculations with the result of producing gonorrhea.

Bockhart⁽³¹⁾ (1886) tried to obtain pure cultures of gonococci by the plate method, which he devised, for which purpose he employed mixtures of human blood serum and agar, but the results of his experiments were doubtful, as they were not confirmed by transplantation to the human urethra.

Bumm⁽³²⁾ (1887) was the first to obtain undoubted pure cultures of gonococci. He was also the first to obtain positive re-

sults from the conveyance of a second and twentieth generation of a pure culture of gonococci to the female urethra. After several unsuccessful attempts (1885) this writer employed human blood serum, obtained from placenta for his cultures. Gonorrheal pus was spread upon the blood serum. At a temperature of 37°C., after 36 to 38 hours small gray transparent colonies appeared on the surface. The growth of the culture ceased at the end of two to three days, therefore reinoculations must be made frequently.

By means of the inoculation experiments of Bumm, the etiological importance of the gonococcus was fixed beyond all doubt, but not much was accomplished from a diagnostic and biologic point of view, as the growth of the gonococcus on the nutrient media devised by Bumm was still very uncertain.

Anfuso (1891) made pure cultures of gonococci in the fluid from hydrarthros and obtained positive results from his inoculations of the male urethra.

Wertheim⁽³³⁾ (1892) made an important advance in cultivating the gonococcus and in demonstrating its pathogenic character. Wertheim used for the culture of the gonococcus the nutrient medium described by Hueppe, consisting of agar and blood serum and employed for this purpose the plate method first recommended by Bockhart (1886). He obtained human blood serum from the placenta, treated it with gonorrheal pus; two dilutions were then prepared; and about 3 cm. of the preparation was mixed with an equal amount of liquified nutrient agar (2 per cent. agar, 1 per cent. peptone, 0.5 per cent. sodium chloride) and poured into plates.

The Wertheim serum agar is made in the following way: If the plate method has been determined on for the isolation and cultivation of the gonococcus, a small test tube containing a few cubic centimeters of fluid human blood serum is inoculated with gonorrheal pus; two further dilutions are then made in the ordinary way into two other test tubes, which are quickly warmed in the bath to 39 to 40°, when 2% fluid agar, cooled to even 40°C. is added, and the contents of the individual glass tubes are poured out quickly into plates.

If on the contrary the gonorrheal pus is to be placed on the surface of the nutrient medium, the serum agar mixture described

is permitted to harden obliquely in the test tube, when the material for inoculation is spread on the surface in the ordinary way.

Wertheim showed that the gonococci grew best on a mixture of 2 to 3 parts bouillon peptone agar and one part human serum, and that this medium was better for their culture than human serum alone. His nutrient medium is not only best for the gonococcus, but permits also of a superior hardening. Five successful inoculations of pure cultures of gonococci were made on the male urethra.

An important modification of Wertheim's method was made by Finger⁽³⁴⁾, Ghon and Schlagenhauser (1894). They took some gonorrheal pus on a small platinum spatula and stroked it in parallel lines on previously poured petri dishes. In this way the necessary heating to 40°C. that was so dangerous for the gonococci, but necessary according to the method of Wertheim, was avoided. As it was difficult to obtain human blood serum, these authors employed urine agar (one part sterilized human urine, two parts 2 per cent. peptone agar). This nutrient medium, however, is uncertain for the cultivation of the gonococcus. As Finger admitted, urine agar is indicated only when gonococci were very luxuriously present in the pus. According to Heiman⁽³⁵⁾ further cultures of gonococci in higher generations cannot be obtained. Kiefer, Schaffer, Steinschneider, the author and others did not obtain pure cultures of gonococci on the urine agar of Finger, Ghon and Schlagenhauser, however favorable results were reported by Valentine⁽³⁶⁾ (1895), even though this latter author took human urine containing sandal wood oil.

Kral⁽³⁷⁾ (1894) employed serum mixed with agar, heated to 100° C., filtered and sterilized. No inoculation experiments were made on the human subject. The results were doubtful.

Turro⁽³⁸⁾ (1894) claimed to have cultivated the gonococcus on acid gelatin and on peptone bouillon. His microbes grew at the temperature of the room and those grown on peptone bouillon were virulent on the 71st day, and when inoculated into the urethra of dogs, provoked urethritis, often cystitis, pyelonephritis and general pyemia. No inoculation experiments were made on the human urethra. Certainly Turro's cocci were not gonococci, a view that was confirmed through the investigation of Jundell⁽³⁹⁾ and Ahmann (1897).

Kiefer⁽⁴⁰⁾ (1895) used more peptone (5%) and more agar (3 to 4%) to which he added a third portion of ascites fluid. Ascites and inflammatory exudates are easier to obtain than human serum. Wertheim's nutrient medium is very satisfactory and its intense moisture variably favors the growth of gonococci, while the agar of Kiefer is easy to dry in the incubator and thereby becomes useless for cultures of gonococci.

On the contrary Kiefer suggests surface inoculation instead of plate pouring, as the gonococci do not flourish in the depth of the nutrient medium and because the temperature of 30 to 40°C. which the gonococci must tolerate, if only for a short time, for the plate method damages them.

It is better instead of plates and petri dishes as used by Kiefer to employ test tubes with obliquely stiffened serum agar, as the plates tend to dry on the surface unless special precautions are taken.

Kiefer's nutrient medium contained 3½% agar, 5% peptone, 2% glycerin and 0.5% cooking salt. This fluid is mixed with an equal amount of sterilized ascites fluid and poured into petri dishes.

Lewin⁽⁴¹⁾ (1895) reported good results with the urine agar of Finger, Ghon and Schlagenhauser, even though the urine was taken from a patient who had taken sandal wood oil, *mirabile dictu*.

Steinschneider⁽⁴²⁾ and Schaffer (1895) obtained a very good nutrient medium in the fluid obtained by puncture from a gonorrheal arthritis of the knee, to which was added two parts of agar. As can be readily understood the fluid obtained from the knee was free of gonococci.

Hammer⁽⁴³⁾ (1895), on account of the difficulty of obtaining human blood serum, experimented with other human exudates and found that the smallest amount of albumen in the same was necessary for the culture of gonococci, as after precipitation of the same, a pure culture could not be obtained. He, therefore, used for his experiments urine containing albumen to 1½%, at times with the natural acid reaction, again alcalized with glycerin agar poured out on to plates, and then inoculated the surface with cultures obtained from 12 cases of infectious colpitis. The growth of gonococci, according to Hammer, was greater than on human blood serum

agar, but no inoculation experiments upon the human urethra were undertaken. Nicolaysen⁽⁴⁴⁾ (1896) recommended pleuritic exudate peptone agar for the same purpose.

The plover agar used by Schrötter⁽⁴⁵⁾ and Winkler (1890), as well as the vitellus agar of Steinschneider⁽⁴⁶⁾ (1897) are not satisfactory substitutes for the culture medium of Wertheim, also the serum of rabbits warmly recommended by Christmas⁽⁴⁷⁾ (1889), as well as the "sang gelose" of M. Sée,⁽⁴⁸⁾ consisting of rabbit's blood mixed with agar appear to be useless for cultivating the gonococcus.

According to the assertions of Schaffer⁽⁴⁹⁾ (1897) it is advantageous to add splenic agar to the bouillon agar, as the gonococci grow more luxuriantly. In the same year Wassermann⁽⁵⁰⁻⁵³⁾ recommended pig serum nutrose agar, consisting of 15 c. cm. pig serum, as free as possible from hemoglobin, diluted with 30 to 35 ccm. water, when 2 to 3 ccm. of glycerin is added, and finally 0.8 to 0.9 gr. of about 2 per cent. nutrose. This mixture is shaken over the flame to the cooking point, when the formerly cloudy fluid becomes clear and can be heated as long as one wishes, for the purpose of sterilization, however, 20 minutes is generally long enough.

For the preparation of obliquely hardened test tubes, or plates, the sterilized serum is mixed with equal parts of the ordinary 2 per cent. peptone agar, however it is generally advisable to pour the pig serum nutrose agar into plates, as obliquely hardened test tubes are apt to flow, on account of the slight solidity of this nutrient medium.

The nutrient media recommended by Van Nissen⁽⁵¹⁾ (1898) merit no particular mention.

Thalmann⁽⁵²⁾ (1900) discovered that gonococci could be easily cultivated on sterilized sections of the brain. He also discovered that gonococci could grow on customary media, if their reaction be relegated to a definite degree of acid. The most preferable reaction of the nutrient medium was obtained by adding to it phenolphthalein as an indicator, with 2.3 the amount of salt solution necessary for complete neutralization.

Unfortunately, the assertions of Thalmann have been confirmed only by one author, Strömberg, who, by the aid of the Thalmann

nutrient medium, was able to cultivate gonococci, from the secretions of 27 out of 68 prostitutes, in whose secretions no gonococci could be found by microscopic examinations.

Nicolaysen⁽⁵⁴⁾ (1901) made cultures from two cases of gonorrheal urethritis on ordinary agar, and he was able to produce 15 generations on this medium. Urbahn⁽⁵⁵⁾ (1901) cultivated many generations of gonococci on glycerin agar.

Wildobolz⁽⁵⁶⁾ (1902) employed pseudomucin agar. The pseudomucin is precipitated by alcohol from the fluid of ovarian cysts and represents a gray powder, that in proportion to 5/1000 is added to 2 per cent. slightly alkaline peptone agar and is cooked for an hour. This nutrient medium is not as serviceable as serum-agar, but nevertheless the gonococci often grow very abundantly upon it, with opal white color, but quickly perish. Lipschütz⁽⁵⁷⁾ (1904) recommended Merck's albumenagar prepared from eggs.

After all that has been done and said, if the gonococci are very scant in a secretion, we possess no staining method, no nutrient media that will give us positive results. Also we possess no nutrient medium, that when inoculated and remains sterile, permits us to be sure that no gonococci are present in the secretion concerned. When staining methods verified by culture are successful they may be said to settle any doubt that may arise as to the nature of the bacterium, but in using these methods it must be remembered, that the result of staining methods depends very largely upon the technic of the examiner, that the gonococcus is often exceedingly difficult to cultivate, because there are but few media upon which this bacterium can be grown advantageously. Hence, should the result be positive, the diagnosis is settled, but on the other hand, should the result be negative, the bacteriologist is just as badly off as he was at first regarding the certainty of the diagnosis.

On the best nutrient media the gonococcus multiplies only within the temperature limits of 30 to 38.5°C. Wertheim (1894 and 1900) asserted that the gonococcus grows well at a temperature of over 40°C., but this assertion has not been confirmed. According to the investigations of Kiefer, Schaffer, Steinschneider, Finger, Scholtz and the author, the gonococcus is killed after some hours by a temperature of 40 to 41°C., even though the temperature rises gradually.

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Obituary—Dr. Felix Formento.

Dr. Felix Formento, at the age of 70 years, died in New Orleans on June 4. He was seized with an attack of apoplexy while at dinner and passed away almost instantly.

The deceased was born in New Orleans on March 16, 1837, and received his early education at Jefferson College and later in Italy, where he was graduated from the Royal University of Turin in 1857, with a degree of Bachelor of Science and of Letters; subsequently he acquired the diploma of Doctor of Medicine from the same institution.

Dr. Formento served notably in the Civil War, spending most of his time in and near Richmond. In New Orleans the Doctor, during his many years of usefulness, rendered valuable public service in hospital and state health positions. He was prominently connected with the Board of Health, and at all times was a student of epidemic and infectious diseases.

In 1882 he attended the Congress of Hygiene and Demography at Geneva as a delegate from the State Board of Health. He was an active member of the Orleans Parish Medical Society, the Louisiana State Medical Society, and in 1891-1892 was made President of the American Public Health Association, of which he was afterwards a prominent member.

Dr. Formento was a linguist and eminent in his association with the Louisiana Historical Society, of which he was one of the oldest members and most distinguished contributors. His literary contributions to medicine and to the history of Louisiana are numerous and notable.

In tendering earnest condolence to the bereaved members of his family and his many friends, the JOURNAL desires to place a tribute here to his position as a physician, citizen and gentleman.

Louisiana State Medical Society Proceedings.

(EDITED BY PUBLICATION COMMITTEE).
P. L. Thibaut, M. D., Chairman.

1906 MEETING (*Concluded.*)

My Experience as to the Recognition of Early Primary Cases and as to the Education of the Laity.

By E. M. DUPAQUIER, M. D.

I was supposed to be one of the guilty practitioners who had failed to report their early cases, in 1905, because for years back a good deal of my daily practice occurs in the French Market neighborhood. And this impression, abroad at the time, is demonstrated by the exclamation of one of our health officials, "why didn't you say so, a month ago!" when I reported my first cases. I wish to state here that as a matter of course I did not see a suspicious case, in my judgment, until July 12, 1905, and this statement is made here not to clear myself, but to bring up the question of the clinical picture of that non-virulent strain of yellow fever which is part of the "*problem*" as Sir Patrick Manson says. All the cases of fever I had treated late in June and early in July were in infants, children and youths, and all recovered under antimalarial treatment, as the picture was that of a bilious, virulent fever, so-called. I now believe that all these cases were yellow fever cases of the non-virulent strain, and did not recognize them as such at the time. The first adults I treated died of a most virulent yellow fever, clinically typical, and of course I recognized them, and these were the first cases I reported. The emetic and quinin, which did so well in my younger patients, apparently in these adults precipitated matters. My experience therefore, encourages me to accept the view of most of the United States Marine Service men that "bilious remittent fever" does not exist per se, and that these cases should be screened, and treated as suspicious in places subject to yellow fever through climatic and mosquito conditions.

I am not prepared to say that this view is absolutely correct, but

I admit that as a precautionary measure it is "acceptable." Of course, our experts cannot recognize the non-virulent strain of yellow fever, and these, possibly, are the early primary cases, clinically similar to the so-called bilious remittent fever.

Now, while we in Louisiana might accept the view that "bilious remittent" is the "non-virulent strain," and that we had better, through precaution, isolate and screen the first cases, just think what fuss our kind neighbors would make over this. And they around us (I will not mention any State in particular) will not "isolate and screen" their bilious remittent cases. So, to what all these precautions in Louisiana would avail, if not followed everywhere?

That is the kind of education we should start all over the Southern States, not only in our State; and, a uniform movement everywhere, in common, over the whole territory subject to yellow fever, should be continued to have the laity and the doctors to understand that bilious remittent cases should be isolated and screened.

In trying to hold up this view I have failed to convince, but I believe it would be "education" in the right direction.

Regarding the education of the laity about the stegomyia, I believe in supplementing the public lectures by a private talk every time occasion presents itself. With this in view I have in my office a large sized picture of a stegomyia that catches the eye of every man, woman and child that call to see me, and in a few words, on the quiet, I have impressed many with these well established facts concerning the mosquito. I think that if every one of us did that quiet work in private it would surely help the public educational campaign.

Mosquito Doctrine of the Yellow Fever Etiology.

By CARLOS J. FINLAY, M. D., Havana, Cuba.

Having been favored with an invitation to present a paper on the "Mosquito Doctrine" at this meeting of the Louisiana State Medical Society, I shall endeavor to summarize what I conceive to be the present status of that doctrine with regard to the etiology of yellow fever.

The yellow fever germ has hitherto eluded all attempts to bring

it within range of our visual perception, and in view of the fact that when present in the blood of yellow fever patients it passes through the pores of porcelain filters, it is supposed to be, at least during that phase of its development, ultra-microscopic. Its only known habitats are: 1, the body cavity of human subjects whose system is susceptible to the yellow fever poison, and 2, the coelom and mouth-parts of a particular kind of mosquito, known as the *stegomyia fasciata*, Theo., from which it is inferred that it constitutes a two-host endoparasite which, as will hereafter be explained, requires to go through a preliminary phase of development in its human host before it can establish itself as a life-long parasite of the mosquito.

The natural life-cycle of the yellow fever germ commences in a non-immune to whom the disease has been inoculated by an infected mosquito of the aforesaid species.

After the completion of an incubation period which usually lasts from three to six days, the presence of the germ in the blood or filtered serum of the patient can be demonstrated even within the first hours of the incipency of the attack, inasmuch as any healthy *stegomyia* which is allowed to bite the patient at this early stage of the disease will be likely to acquire, after the lapse of a certain number of days, the faculty of reproducing the disease in the non-immunes who subject themselves to its bites, and a drop of the patient's blood injected to a non-immune will likewise produce a characteristic attack of yellow fever.

This demonstration of the presence of the germ in the blood of yellow fever patients must be considered as one of the most important achievements among the many which stand to the credit of Walter Reed and his associates. But this germ-reaction disappears from the blood of the patient after the third or fourth day of the attack, which circumstance, from another very interesting series of experiments devised by the same Commission, I am inclined to attribute to the formation of antibodies which bring about the death of the germs in the body of their human host. Those experiments consisted in having, as it were, transplanted the active germs contained in the blood of a natural case of yellow fever by, first, injecting, on the second day of the attack, 0.5 c. c. of the patient's blood to a non-immune who, after an incubation of $1\frac{1}{2}$

days, developed a characteristic attack of the disease, and again on the first day of this experimental attack injecting 1.00 c. c. of the patient's blood to a second non-immune, who in his turn also developed, three days later, an experimental attack of yellow fever. A healthy stegomyia was then allowed to bite this patient nine hours after his invasion, and the insect was applied, 29 days after its contamination, to a non-immune, at Las Animas Hospital, producing a mild but characteristic attack after an incubation of three days. Thus it was proved that the vitality of the germ had been preserved in three successive human hosts, and without the intervention of any mosquito, during a term of thirteen or fourteen days (estimating the incubation in the primitive natural case at 3 or 4 days).

Dr. Reed and his colleagues have regarded the direct transplantation of the germ from the patient to a non-immune, accomplished by them in the above experiments, as a mere laboratory performance which could have no analogon in nature; but from a theoretical standpoint the soundness of this conclusion may be questioned. Let us suppose that a certain number of healthy stegomyia had bitten their primitive natural case on the second day of his attack, and that after having bitten the patient these insects had been preserved in an empty jar, without water or food of any kind. I know positively, from my personal experience in some two hundred instances, that under these conditions the stegomyia live perfectly well until they have completed the digestion of their previous meal of blood, and are ready for their next bite, which, in Havana, during the summer season, represents a term of two or three days. I consider that some of the germs contained in the blood of the patient might, under these circumstances, remain attached to the satæ of the sting, which had been immersed in the blood or in the perivascular lymph during the operation of the biting. At the next bite of the same insects these germs might be wiped away from the satæ and deposited in the track of the wound. In this event, the contaminated stegomyias would be acting quite differently from its usual role in the regular propagation of the disease, as will be explained hereafter; but it would constitute a process of direct transplantation of the germ not unlike the one accomplished by Walter Reed and his colleagues, through the direct injec-

tion of the infected blood. The number of germs thus transplanted by the *recently contaminated* mosquitoes would, however, be infinitely less, and their retention upon the satae during a couple of days might be a further cause of attenuation. Such a process was considered by Dr. Claudio Delgado and myself as a sort of yellow-fever vaccination, when we undertook a long series of inoculations of this kind upon one hundred non-immunes, from 1881 to 1900, (See Table 1, p. 325, vol. VIII of Reference Hand Book of Medical Sciences, Revised edition. William Wood, New York, 1904). As this table shows, our results were undoubtedly encouraging, but our technic, in view of subsequent discoveries, must be acknowledged to have been lacking in the preciseness demanded for a scientific demonstration.

According to our recent experience in yellow fever epidemics, the direct inoculations through recently contaminated mosquitoes need not (necessarily) be taken into consideration as a natural mode of propagation of the disease. In the natural course of events, after the human germ, through the bite of the stegomyia, has been transferred from the patient's blood into the body of this insect, it goes through certain unknown transformations during which it loses temporarily its pathogenicity for man. The minimum duration of this period of latency in the body of the contaminated stegomyias is usually reckoned at 10 or 12 days, but it may be prolonged by several days, and even weeks or months, under the influence of low temperatures or climatic conditions which either retard the evolution of the germ in its mosquito-host or deprive the latter of the power of biting and of inoculating the germ. On the other hand, there are reasons for suspecting that when the number of germs transmitted from one host to the other is greater than usual, or their virulence is exceptionally high, the duration of the incubation period either in the mosquito or in the human host may be shortened.

Under favorable conditions, after the completion of the period of latency mentioned above (mosquito incubation period), the infected stegomyia retains the power of inoculating the disease to the non-immunes whom it chances to bite until it dies or loses the power of biting.

The only process known by which an infected stegomyia may

transmit its infection to other insects of its species is through the intermediary of a human host to whom it has successfully inoculated the disease.

Although fomites, in the usual acceptation of the term, are, as a rule, incapable of propagating the yellow fever infection, there is no reason for doubting that any healthy *stegomyia* which is allowed to feed upon fresh blood that has been discharged by the patient within the first days of his attack, will be likely to become infected just as well as if it had bitten the patient. It is prudent, therefore, to recommend that such discharges be destroyed or sterilized in order to preclude this possibility.

If the infected mosquito dies without ever having bitten a person who is susceptible of contracting the disease, the germ will also die and all danger of propagation from that source will cease.

That the solidity of my original mosquito theory of yellow fever transmission has been confirmed in all its most important details, must be acknowledged from the fact that even at the present day, after the very thorough investigations made since December, 1900, in Havana, in the United States, in Mexico and in Brazil, almost all the prophylactic measures which have proved so successful in recent campaigns against the propagation of yellow fever, aim at the fulfilment of one or another of the three essential indications which are set forth in the final paragraph of a paper which I contributed to the Eighth International Congress of Hygiene and Demography, held at Budapest in 1894, namely:

1. To prevent those insects (*Culex mosquito* R. D., now *Stegomyia fasciata*, Theo.) from stinging yellow fever patients,
2. To destroy, as far as possible, the mosquitoes which may have become infected.
3. To consider any place unsafe so long as the last mosquitoes which have stung yellow fever patients may be alive in it.

(See *Comptes-Rendus et Mémoires du Huitième Congrès d'Hygiène et Démographie*.. Vol. 11, p. 706).

It seems unnecessary to state that the third of the above indications implied the exclusion from such places of all non-immunes and medical *surveillance* for all non-immunes who have visited those localities until the expiration of the incubation period after their last exposure.

Both Louisiana and Cuba have obtained within the last six months the fullest corroboration of the efficiency of prophylactic measures prescribed in accordance with the above indications; but I cannot agree in considering them as exhaustive so long as more stress is not laid upon a source of danger which is very generally recognized, but against which adequate measures are not usually adopted. I refer to the danger of introducing mosquitoes contaminated with germs which are still in the period of latency. Such insects may be imported in vessels carrying a large number of non-immunes without giving any warning of their contamination, and if conveyed to some distance from the place of landing before the germs have reached their full maturity, it might prove extremely difficult to retrace the infection to its real source.

Pruritus.

By J. F. BUQUOI, M. D.

Pruritus is a functional disease of the skin, characterized solely by the sensation of itching without the existence of structural change. It is a common form of paresthesia which is to be distinguished not only from prurigo, a rare disease of the skin, but also from the symptomatic sensation of itching, which is brought about by a number of cutaneous disorders, such as eczema, scabies, and the dermatoses produced by pediculi. Hebra was the first to recognize the independent character of the disease, but it is regrettable that he did not give it a name distinct from that which is applied to a symptom common to several maladies of the skin.

Etiology. The causes of pruritus are many, and to treat any given case intelligently, it is necessary to ascertain the underlying condition. The disease may occur at all periods of life, and in both sexes, but its aggravated forms are peculiar to middle life and advanced years. It is always secondary to some disturbance of the nervous system. Pruritic symptoms are not infrequently found associated with several internal disorders, such as malaria, tuberculosis, carcinoma of the viscera, liver and kidney diseases, (especially jaundice, Bright's disease, diabetes) and derangements of the alimentary tract, including those due to intestinal parasites,

hemorrhoids and dietetic or medicinal ingesta. *Pruritus* is often seen in the gouty, rheumatic and neurotic, and undoubtedly is due in some cases to auto-intoxication.

It is often reflex in character, and may be associated with almost every one of the functional, and not a few of the organic disorders of the uterus and adnexa. In the male sex it may be dependent upon genito-urinary diseases, including urethral stricture, vesical calculus, orchitis, and sexual perversions. A predisposing cause may often be found in hyperesthesia, either inherited or acquired (sometimes as a result of long-continued inflammatory dermatoses, such as eczema), as a consequence of which insufficient external irritants cause pruritus.

Lastly, moral emotions of a depressing character, mental distress occasioned by bereavement play an important part in the etiology of pruritus.

Symptoms. In pruritus the single primary symptom is itching, varying in kind and degree. It may be general or partial. Beginning in either form by a tickling, pricking, crawling or itching sensation in the skin which causes the sufferer to rub, press, scratch, or otherwise irritate the affected integument. The impulse to scratch becomes well-nigh irresistible. Brushes, combs, coarse towels, and even metal instruments are used in severe cases for the purpose of temporarily relieving the local distress. The itching may be constant or intermittent, but usually the latter, occurring paroxysmally in most cases and being almost invariably worse at night. Moral emotions, a draught of cool air, the warmth perceived when in bed, pressure of clothing, suffice to bring on a paroxysm.

The objective cutaneous symptoms which may be presented are all secondary and always resulting from self-inflicted injury. The integument resents the harsh treatment to which it is subjected by displaying wheals, hyperæmic blotches, reddened papules, excoriations, characteristic scratch-lines and the minute blood crusts which indicate the papillary layer of the skin has been torn. Dermatitis in varying degrees, and even eczema, may still further develop and add to the local distress. Leloir and others have reported cases in which the disease was followed by a dermatitis, not traumatic in origin, and persisting for long periods of time and relieved only

when treatment was directed to the nervous system. Having considered pruritis in a general way, I will now mention the most common localized forms met with in every-day practice.

PRURITIS SENILIS, a term often loosely applied to any form of the disease, occurring in persons of advanced age, in whom it is very frequent. The cause in the vast majority of these cases is due to defective metabolism, indigestion, mal-assimilation and elimination with the resulting hepatic, nephritic, circulatory, arthritic and neurotic disorders so frequently met with in those of advanced years. Such pruritus proper is that form due to atrophic degenerative changes in the skin and other tissues of the aged, and is practically without treatment.

PRURITUS GENITALIUM is a very common form of pruritus, and at times a very distressing affliction. Occurring about the female genital organs, it constitutes the pruritus vulvæ of writers, having its seat in the labia, or in the vagina. In the male the scrotum, penis and adjacent cutaneous folds may be the seat of the trouble. Careful inquiry should be made in these cases for pin-worms of the rectum or vagina, for albuminuric and saccharine urine, and uterine or ovarian diseases. Perverted sexual practices may be the root of all evil. In these cases the itching is intense, as shown by the erosions and excoriations of the regions attacked.

PRURITUS ANI is a disorder of both sexes, and may coexist with pruritus of the genital region. The anus may become infundibuliform from induration; its mucous surface excoriated, its cutaneous border seamed, puckered, eroded and fissured. Hemorrhoids, fistula, ascarides, chronic prostatitis, rectal impactions and fissures, proctitis, unnatural practices, gout, alcoholism, diabetes, may each be responsible for this condition.

PRURITIS NARIUM is a frequent symptom of irritation of the mucous membrane of the nose. It is a common, precursory sign of an approaching paroxysm of rose or hay asthma.

PRURITUS PALMÆ ET PLANTÆ is a rare form of this disorder, in which the itching is confined to the palms and soles. It complicates gout, malaria, hyperidrosis and asthma.

PRURITIS HIEMALIS—(Frost Itch, Winter Itch)—Under this title Duhring describes a harsh and pruritic condition of the skin without structural change, invading all surfaces of the body, but

chiefly the inner surfaces of the thighs, calves of the legs, and around the joints of the lower extremities, beginning in the autumn and continuing until spring. It resembles many features in common with the forms of pruritus, already described. There is nocturnal exacerbation and the absence of primary lesions. The secondary symptoms are also similar, as a result of scratching we find roughness, perifollicular redness and papulation, torn and fractured hairs, excoriations, blood crusts, and in very bad cases an induced dermatitis. As soon as the atmospheric temperature rises it abates in severity. It is unquestionably a disease of northern climates, more particularly of those where the variations in temperature between the extremes of the summer and the winter range between 30° and 100° F.

Diagnosis.—Itching is a symptom associated with so many diseases of the skin that the one important point in the diagnosis of general pruritus is the absence of any primary lesions. However, when from the excessive itching with scratching, traumatic dermatitis and eczema appear, the disorder may be confounded with these inflammations. The complaint of the patient and the discovery of some underlying local or systemic condition will at once enlighten the practitioner as to the true nature of the disease.

Upon a careful examination with the clothing removed, it will be observed that the regions affected are those most accessible to the hands. The anterior surfaces of the body are more frequently involved than the posterior, for that reason. The back and interscapular region are usually untouched. The tibial regions of the legs and the forearm suffer more than the calves and upper arm. The lower abdomen and inner surfaces of the thighs are always punished severely.

When the disease is localized it is very often complicated by an eczema or dermatitis. Attention should be directed to the history of the case which may reveal the fact that the pruritus existed some time prior to the development of objective symptoms, and perhaps even more.

Prurigo, with its infiltrated skin, its primary papules, its intense itching, beginning in infancy and persisting through life, can scarcely be mistaken for pruritus cutaneous.

TREATMENT.—To treat any case of pruritus with any degree of

success it is necessary that the cause be sought for, recognized and remedied. The manifold systemic and visceral disorders which manifest themselves by cutaneous lesions should be considered and an exhaustive study of the physical and mental history of each patient will be essential from the start. The gastro-intestinal tract, kidneys, liver, bladder, uterus, prostate gland, rectum, and indeed any one of the viscera, may require treatment before the pruritic symptoms disappear. Cutaneous irritation, caused by certain drugs, taken internally, besides the ingestion of certain kinds of foods, should always be kept in mind.

Strychnia, iron and other tonics are indicated in atonic conditions. The nutrition of the nerves supplying the skin can often be improved by the judicious use of C. L. oil.

The use of sedatives internally to relieve any form of pruritus is mentioned only to be condemned. Narcotics, while they give temporary relief, tend to relax the skin, and in the end aggravate the condition. This applies particularly to the different preparations of opium. The bromides, and even chloral, may be given in extreme cases for a short period of time, but always with the understanding that these remedies will not produce anything but a temporary relief. Furthermore, there are strong reasons for refusing to employ preparations containing opium, cocain and drugs of this class, to relieve the subjective symptoms. The morphia or cocain habit has been contracted by treatment of this sort, when the patient, often a nervous woman with an intolerable pruritus vulvæ, is in a condition peculiarly susceptible to the action of remedies of this class.

Cathartics and laxatives and an abundant supply of pure water taken internally is to be strongly advocated, as well as diaphoretics, diuretics are often helpful in eliminating toxins to which the pruritus may be due. They act by depleting the cutaneous vessels, and possibly in a reflex way by diverting irritation to other parts. Pilocarpin and jaborandi may be used in such cases to advantage.

Montgomery says quinin and calcium chloride in full doses will sometimes relieve pruritus in children.

Local Treatment.—The indications here are to protect the skin from all sources of irritation, and to relieve the distressing itching. Of first importance is the clothing. Garments worn next to the

skin should not be woolen, but of cotton, linen or silk, the meshes of which should be filled with a fine powder to reduce friction between clothing and skin. Sufficient outer clothing should be worn to protect the body from sudden changes.

Hot baths, unless specially indicated, and the excessive use of soap, render the skin unduly sensitive. The bran, oatmeal and alkaline baths are to be advised. When the skin is free from excoriations the hot and cold douche used alternately may be used to give tone and vigor to the skin. For some forms of localized pruritus very hot baths, to which a little bicarbonate of soda or borax is added, may be grateful to the patient.

The source of irritation is scratching, and one that is extremely difficult to combat. Until it is overcome no relief can be expected, as when the skin is rubbed or scratched there is produced a local hyperemia and dermatitis which adds to the local distress. It is not sufficient to tell the patient not to scratch; the surface must be protected by proper dressings and the itching relieved by the use of antipruritics.

Of the latter, carbolic acid easily takes first place. It has been well termed the morphin of the skin. In lotions it may be used in strength of 1 to 5 per cent. In ointments it may be increased. Bronson uses it in 25 per cent. strengths, stating that it is much more slowly absorbed than in aqueous solutions. The antipruritic effect of carbolic is enhanced by the addition of alcohol in aqueous solutions, besides the latter renders it less toxic. Salicylic acid, hydrocyanic acid, menthol, camphor, thymol, creosote, chloral and chloroform and a long list of other drugs, in strength varying from 1 to 5 per cent., in lotions, oils, and ointment may be used with effect. Morphia, atropia and cocain give temporary relief in lotions or ointments.

Pastes and ointments are irritating to most pruritic skins, but in a few cases more acceptable than lotions. Among other remedies occasionally of service are ichthyol, resorcin and bichlorid of mercury. Bronson speaks very highly of hydrogen dioxid. The tarry preparations are, as a rule, not well borne, though in a few instances prove extremely valuable. Liquid preparations are preferable.

Having discussed the treatment of general pruritus, I will now

touch the localized forms, mentioning a few remedies especially employed in pruritus of the different regions.

In ano-genital pruritus, alkaline hot baths at night are especially to be recommended. There is a special indication here for the use of the preparations of tar. In the distressing itching of the scrotum and anus, they are particularly beneficial. Special mention may be made of the tinct. of tar, oil of cade, or of white birch. Solutions of silver nitrate 10 grs. to the oz. may be used in fissured conditions of the anus.

The scrotum, when attacked, requires to be supported by a suspensory bag, lined with lint smeared with an ointment.

For pruritus vulvæ, Wiltshire recommends decoctions of marsh-mallow, almond meal, slippery elm and rice, and the infusion of tobacco, 2 ozs. to the pint. Vaginal injections of hot water, suppositories of cocoa butter, medicated with morphia, belladonna, or carbolic acid are all valuable to relieve the patient. The oleate and muriate of cocain, the latter in from 2 to 4 per cent. solutions, will be the only agents in severe cases to give the sufferer some relief.

For pruritus hiemalis, Hyde recommends emollient unguents, glycerin in the form of lotion or ointment, and alkaline baths. The various dusting powders have given better results in some cases than fat containing substances.

Lastly, the fact should not be lost sight of that many cases of intractable pruritus have been benefitted by change of one's mode of living. The distraction incident to travel, aided by change of scene and climate, is at times a potent factor in relieving cases that otherwise proved rebellious to treatment.

The Abortion of Pneumonia.

By V. LEHMANN, M. D.

The increasing prevalence of this most widespread and fatal of all acute diseases, ranging on a par with tuberculosis in its havoc incessantly at work among the population of the globe, is my humble excuse for coming forward to offer to suffering humanity my mite of experience in its elimination.

No doubt the method here proposed is familiar to many of my brethren in the medical profession. Nevertheless, the more and

more appalling records of fatal termination from this dreadful scourge is irrefutably convincing to the fact that to good many more of our brother practitioners it is not, hence to these is the following information most cordially tendered.

Laying no claim to its originality, I consider myself more than sufficiently fortunate to have come into its possession through the columns of the New York "*Medical News*" of April 13, 1892, over the signature of Dr. George E. Talbert, to whom I have since endeavored in vain to express my appreciation for this invaluable information, the doctor having in the meantime, as per report received, gone beyond the reach of our earthly limit to his just reward.

Failure to take down detailed notes of all cases it has been my good fortune to carry to a successful issue in less time than ordinarily expected has been the principal cause of my delay in giving light to this brief paper until my sense of duty to the profession at large has finally set aside this last objection and compelled me as it were, to most humbly submit from mere memory to your kind consideration the main foundation of this method of aborting the disease in question.

While treating a young patient, a colored boy of about fourteen years, afflicted with a traumatic or contusion pneumonia as manifested by the characteristic symptoms of an agonizing pain on the side of the chest with a short, dry and painful cough, rusty sputum, accelerated breathing accompanied by an expiratory moan, temperature 104°, pulse full, the lung at seat of pain showing on percussion a notable consolidation and on auscultation sibilant râles, the condition of trauma in this case being established by the history of a fall from a horse on the chest-wall as having been the main cause of the disease. With no expectation of recovery by the then routine treatment before the serial changes of congestion, red and gray hepatization and final resolution had been gone through, a period of about three or four weeks. . . . I immediately ordered all medicines prescribed until then to be stopped, substituting in their stead the new method of treatment as outlined in the above-mentioned article towards which during treatment of this case my attention was accidentally invited, and which I hereby give verbatim:

"Starting with ten grains of calomel, followed with a half

ounce of castor oil, a cantharidal blister is applied over the seat of pain. Immediately commencing with dram doses every three hours of fluid extract of ergot, the latter being used with the view of constricting the unstriped muscular fibres of the arteries, thereby relieving the heart by forcing the blood away from the congested part. If, however, the second stage of red hepatization exists, still give ergot to prevent extension of disease, the blister and cathartic aiding in removing the congestion."

with the gratifying result that my young patient was discharged cured, up and about his usual avocation on the third day of this experiment.

The same line of treatment, at times with very slight modifications as the particular case might indicate, has been followed in many more cases with the same repeated success in patients of all ages, proportioning the doses accordingly. When cases are met with where the above method alone proves insufficient to alter the course of the disease, the following among other measures are additionally resorted to, viz: Quinin sulphate and salol of each five grains every four hours, alternately adding thereto Dover's powder or ammonium carbonate or muriate five grains also, or both, together, according to condition of lungs at the time. For the feeble constitutionally, such as children and some women, are adopted milder measures, substituting the blister by one of the kaolin poultices, through whose powerful help in many cases I feel in duty bound to confess a well-deserved merit, as attested from its endorsement by the pharmaceutical world as well as by the Committee of Revision of the last United States Pharmacopeia.

One of the most interesting cases being an infant of six months of age, with a double or bi-lateral pneumonia, recovering very nicely under the treatment, the kaolin poultice being used instead of the cantharidal blister.

Another exceedingly interesting case being that of my own daughter, at the time about twenty years old, her case being taken charge of at the very inception of the disease, the acute congestive stage, on her rising in the morning with a hurried breathing, complaining of pain on side, percussion at this seat of pain indicating consolidation, fever with a bounding pulse, headache with an anxi-

ous countenance . . . these symptoms being made to gradually disappear under the above-mentioned treatment in the course of the day, until the patient was virtually free from all of them on the very same night of this same day, practically establishing thereby a one-day pneumonia, this latter being her second attack from which preceding one several months before while away from home, she had withstood a siege of about ten or fifteen days under the able treatment of one of our eminent brother practitioners.

How to Meet Tympany and Colitis in Typhoid.

By E. M. DUPAQUIER, M. D.

The ordinary tympany, in cases that are not too toxic, tympany being due to fermentation, is easily met, by revising the diet, giving a slight purge, and, possibly, irrigating the bowels.

But, extraordinary tympany, in cases that are deeply toxic, tympany being due to paresis of the intestines, is not easily met at all. It is one of the features, in the picture of the severe toxemia that is now threatening the life of our patient.

The best measures against toxemia should be employed with the greatest punctuality: cold water and brisk rubbing over the whole body every hour; then, throw a light blanket over patient, tucking it well under him, all this while disturbing the patient as little as possible. Do not depend on the weight of a large ice-bag, left for hours over the abdomen, to put tympany down. Instead, apply constantly over the bowels, covering the loins, hot compresses, and put hot water bag to feet.

Do not irrigate bowels at all. Do not use the colonic tube at all. Do not purge.

Clean the mouth very thoroughly and increase feeding. Expressed juice of porter-steak, well seasoned, soft light pudding, custards, rice paps, soft boiled eggs, by the small-spoonful at the time. Good claret or good beer, instead of whiskey, panopeptone, brandy, and champagne, of routine characteristics. Patient must sleep. Give trional.

Keep up strychnin; start with eserin, one-hundredth of a grain, by needle, three and four times a day.

All these measures tend to restore the "inhibitory function" of

the great centers, and improve the nervous system at large, telling therefore, on the whole economy, which in this predicament is the best method to prevent dissolution, **not** far away.

Colitis appears, occasionally, either in cases of obstinate constipation or cases of very frequent movements.

In the first case give sweet almond-oil and castor oil, in equal parts, by tablespoonful dose, every hour, until relief; or, a pill of calomel-ipecac-rhubarb.

In the second case, give pure methylen blue one grain every 2 hours, until diarrhea is checked.

In no case irrigate the bowels. Stop milk. Give egg-lemonade and vegetable bouillon.

Such drugs as carbolic acid and camphor, betanaphthol and bismuth subgallate are additional measures of value, checking colliquative flux with fermentative colitis.

Hot compresses over the bowels instead of the ice bag, and warm water bag to the feet, the patient well covered with a light blanket, well tucked under him, will produce comfort and restore vitality.

Beware of the routine ice bag "in perpetuation," in both cases, of tympany and colitis.

The Anatomy and Physiology of the Adrenals.

By A. R. TRAHAN, M. D.

As you are all aware, little is known concerning the *true* function of the supra-renal capsules. So far, clinical observations and post-mortem studies have failed to point out with any degree of certainty the part played by the adrenals in the human body. That they are of paramount importance I firmly believe, and with this view I become more deeply impressed as my experience grows larger with that class of diseases in which we note more particularly, and at the very outset, marked impairment of the metabolic functions of the body. With the hope, gentlemen, that the subject will prove to be of practical interest to you, and secure your earnest and active coöperation in the form of a united effort to add to the meagre sum-total of our present knowledge, I selected for discussion "The Anatomy and Physiology of the Adrenals."

The parenchyma is composed of a peripheral portion, the cortex,

and a central area, the medulla, all of which is enveloped in a strong fibrous capsule. From this fibrous covering connective tissue septa are given off which penetrate the cellular substance and divide it into cylindrical masses. The cortex is made up of polygonal cells filled with granular nucleated protoplasm and containing fat-particles. These cells are so arranged as to separate the cortex into three divisions or zones, as follows: the zona glomerulosa, the zona fasciculata and the zona reticularis. In the outermost zone of the cortex, the trabeculæ form polygonal meshes which contain the cells of the gland substance; in the broader middle zone, the meshes are elongated and the cells filling them are arranged in columns radiating outwards. Here the cells are transparent and nucleated, often containing oil globules; in the innermost narrow zone the polygonal arrangement prevails, and the cells usually contain yellowish-brown pigment. In the medulla the stroma forms a reticulum containing groups of cells of very irregular shape. The various groups of cells are separated by large and small septa derived from the fibrous capsule. The larger septa support the capillaries which surround the cells. The medulla contains deeply pigmented cells irregularly distributed within a framework of highly vascular connective tissue, also numerous ganglion-cells, together with a network of non-medullated nerve-fibres and venous channels.

The adrenals belong to the class of ductless glands. They are small flattened bodies situated at the back part of the abdomen, behind the peritoneum, just above the upper end of each kidney. The right one is triangular in shape, the left rather semilunar, larger and at a higher level than its fellow. They measure about two inches in their longest diameter, and are about three-fourths of an inch in breadth. Their size varies with age, being always much larger proportionately in the young child than in the adult.

Blood Supply.—The arteries are derived from three sources, the phrenic artery, the aorta, and the renal artery. Their branches pass along in the trabeculæ and converge to form a capillary plexus in the medullary substance, whence the capillary veins empty into the renal vein on the left side and into the inferior cava on the right.

The nerves are remarkable both for their number and size; they

accompany the arteries in their distribution. Ganglion-cells are found in nerve trunks in the medulla in considerable numbers. The nerves are from the renal and solar plexuses, and also from the phrenic and pneumogastric.

The lymphatics terminate in the lumbar glands.

Physiology.—The supra-renal capsules were discovered by Eustachius, in 1564, but the first theoretical suggestions in explanation of their function were advanced with the investigations of Addison. He first called attention to the relation existing between a peculiar group of symptoms and disease of these organs, and expressed the opinion that extensive pathological lesions thereof caused severe general retrograde changes, and finally death. It was Brown-Sequard who, in 1856, first attempted to obtain some knowledge of the physiological function of the supra-renal capsules by removing these organs from different animals, and afterward noting the symptoms which followed as a result of the operation. He found that death was invariably caused within twenty-four or forty-eight hours by removing both bodies, and that such nervous disturbances as delirium, convulsions, etc., were invariably present. As the cause of death he assigned the accumulation of pigment in the blood-vessels and numerous pigment emboli. From his observations, he reached the conclusion that the supra-renal capsules are essential to life. This opinion was subsequently contradicted. Further observations were not made until Tizzoni resumed the experiments in 1889. Results obtained by him with reference to the vital importance of these organs were practically in accordance with those of Brown-Sequard. Some of his animals survived the extirpation of both capsules nearly three years, but all died. He maintains that the opponents of Brown-Sequard's theory are erroneous and faulty in that they did not extend over a period of time sufficiently long to show the actual pathologic processes from their onset to their termination. Besides changes in nutrition, others were observed referable to altered innervation, to disturbances of the digestive organs and to changes in the blood. From the foregoing, therefore, it appears highly probable that the supra-renal capsules exert a special action on the vaso-motor nerves throughout the body, thereby regulating the circulation and as a necessary consequence secretion and excretion; all of which is prob-

ably accomplished through the agency of some substance elaborated within these bodies and then thrown into the general circulation. Organs so richly endowed with nerves and blood must have some active function to maintain constantly. It is noteworthy, also, that the blood from them is thrown directly from the vena cava to the heart, thence to the lungs, no doubt in order that this active substance from the glands may for awhile yet, unchanged, regulate the circulation through them, and in this manner keep up a constant and adequate supply of oxygen to the system. I believe the day is not far distant when the fuller and more comprehensive study of the special influence of these bodies on the nervous system, and through it on the vital forces, will prove to be the key to success in managing such diseases as syphilis, tuberculosis and diabetes mellitus, at present singly and collectively the bugbear of the medical profession.

A Case of Post-typhoid Sepsis; Quick Recovery.

By E. M. DUPAQUIER, M. D.

J. D., white, native, age 15 years, had a case of typhoid, with positive Widal, from Nov. 12 to Dec. 4, 05, four weeks. His temperature was normal for 6 days. Then he had 99 or 100, in the morning, and 103 and 104 in the evening, with marked shivering. No delirium, but sleeplessness.

Tongue clean and moist. Patient was hungry and felt well. Said he: "*I am hungry and that's all. Give me something to eat.*"

Dec. 10. Patient was kept sitting in his bed; allowed two soft boiled eggs and 4 oysters, with a glass of good claret.

Dec. 11. Coffee and milk with bread and butter. Vermicelli, cooked in bouillon. Six oysters. Pureé of peas.

Day after day, patient's feeding was increased. He slept from the day he ate. He got out of bed on the second day of his solid food diet.

Dec. 15. Temp. was normal day and night.

He never took any drug.

Cases like this should be distinguished from relapses.

TWENTY-EIGHTH ANNUAL SESSION, NEW ORLEANS,

MAY 14-16, 1907.

Annual Report of President.

By DR. HENRY DICKSON BRUNS, of New Orleans.

FELLOW MEMBERS OF THE STATE MEDICAL SOCIETY OF LOUISIANA: It is according to custom that the President should address you at this time on the affairs of the Society, and make such recommendations as experience with your business may suggest.

To an extent, in my opinion, this custom should be more honored in the breach than the observance.

As you will receive from the Secretary, the Treasurer, the Councillors and the Chairmen of the standing committees full reports covering minutely the business of the year, I have no intention of wearying you with a reiteration of details.

As I have observed that the recommendations of my predecessors have usually found an undisturbed resting place in the committee to which the President's report is referred, I shall deal only with matters which seem to me of pressing concern. Permit me to say that it has been necessity—the compelling necessity of ill health—that has caused me to neglect many duties which I would most gladly have performed. Thus I have been unable to visit the various sections of the State and do many other things laid down in our By-Laws as duties of this office. My derelictions, however, have been more than supplied by the work of our capable Secretary. This naturally leads me to my first suggestion.

In this, as in many other organizations, certain officers, when found excellent, should be continued in office so long as they can be persuaded to serve.

A great number of scientific societies follow this plan as to their Secretary for reasons which readily occur to all.

But still more important to us, I believe, is it to retain in their positions as long as possible, our delegates to the American Medical Association and the Chairmen of our Committees on Public Policy and Legislation and on Medical Education.

I doubt if we all fully realize the importance of these two chairmanships. The incumbents are also delegates to corresponding

committees and councils of the National Association, engaged in work of great moment to the profession.

Largely through the efforts of the National Committee on Medical Education, as you know, the term of study necessary to obtain the degree has been lengthened, the number of branches increased and the hours of study devoted to each branch have been proportioned and extended; and, most important of all, the qualifications for matriculation have been much increased. The Committee and Council on Medical Legislation, watching and endeavoring to direct all legislation at Washington bearing upon our profession have already rendered notable service. But their great work in hand, pursued with never-ceasing effort, is the establishment of a national department of health, with a cabinet officer—a physician—at its head. By these efforts such a national department has become more than a shadowy hope. The newly founded Public Health Defense League, already a large body with a membership both lay and medical, has committed itself to the advocacy of a National Department of Health. More important yet, is the accession of the economic section of the American Association for the advancement of science, and by implication, therefore, the sympathy and support of the whole of that Society. The President of the Economic Section, Prof. Irving, of Yale University, has, under instructions, appointed a committee of one hundred interested persons down from the different professions and vocations, "to keep the subject alive and consider the best methods of achieving" success. While we cannot as yet hail the full sunrise, we may certainly perceive the waxing light of the coming dawn. We see that thinking men, and especially the economists from whom we may, by right, expect so much, are beginning to perceive the vast value of our professions' mighty labors and surpassing success in preventive medicine, which form so singular and beneficent a chapter in the book of modern progress. At last our countrymen are learning the folly of spending millions to protect the life and health of the beasts of the field, while neglecting to organize in the most effective way for the protection of the vastly more costly human life that alone gives value to all the rest.

Gentlemen, it is with difficulty that I restrain my utterance on this subject within the sober bounds.

If you feel as I do about it, it transcends every other of the kind; for our profession can never attain the eminence in the eyes of our fellow citizens that it deserves, until we, too, have a representative in Washington, among the councillors of the President. To attain this end there is no labor we should be unwilling to share, scarce any sacrifice we should be unwilling to make. If I have succeeded in giving you any inkling of how important these things appear to me, and you agree with me, then you agree that our delegates to the National Association and the Chairmen of our Committees on Education and Legislation should be continued in their offices as long as possible. For you perceive that these undertakings of the National body are continuous and progressive. Familiarity with program and persons, identification with, zeal and pride in the work can no more be expected if we change these officers annually than success in diplomatic service could be attained by the appointment of a new Ambassador each year. As in the Congress, so in the meetings of the House of Delegates of the National Association, the delegate of long tenure has greatest weight in shaping legislation. Surely we all wish that this Society should take its proper share in the work the National Association is doing for the profession, or in checking the purpose of designing men who might wish to use its powers for selfish purposes. Let us, then, with greatest care, choose our strongest men for these places. Moreover, let us secure, as far as possible, their attendance at all National meetings. I suggest that we set aside a sum adequate to pay the actual expenses of our delegates to the annual meetings of the National Association, and those of the Chairmen of the Committees on Education and Legislation when in attendance on the meetings of the corresponding National Committees. We have men fearless and wise in council who can command attention to their speech in any assemblage; we should be proud to hear their voices in the National gatherings, to mark their influence upon the great affairs of the profession. Gentlemen, Louisiana should lead, not follow.

Let me ask your attention to but one more important question. The time has come when, if we are to retain the respect of the public and our own self-respect, we must find a practical solution of the "Expert witness" question.

Instead of improving with the general improvement of all things medical, this matter has been allowed to go from bad to worse until the late unsavory Thaw case has brought the *reductio ad absurdum* and has come near making an honorable profession a laughing-stock for the whole nation. The spectacle of retained experts, most pitiful when they are honorable men, their view-points distorted by association with plaintiff or defendant, their speech restrained by legal technicalities, made to testify to diametrically opposed opinions, is not longer to be endured. It debauches our proper pride, insults our dignity and revolts the commonest sense of justice. Something must be done.

In my opinion the only proper solution is to follow enlightened example and make the expert witness *amicus curiæ*. If it be feared to leave the choice entirely to the bench, let the court, advising with both parties to the cause, choose either one, or a small commission of experts; let their report be given to the court and be made public by the court, their fees being charged as part of the costs. That the jurisprudence of our State lends itself with special ease to this change we know, on the authority of the learned Kruttschnitt, who once made this matter the subject of an address before the Orleans Parish Medical Society. I suggest that a large, strong, committee of this Society be appointed, that we communicate with the Bar Association of this State and request the appointment of a like committee from their body, and that these committees, acting together, take steps to secure proper legislation on this matter. I feel confident that any bill bearing the endorsement of the State Bar Association and our Society will meet the ready approval of the Legislature. This done, Louisiana will have set a worthy example, and I doubt not that her sister commonwealths will, in time, follow it.

Finally, I should say a word upon our failure to pass the amended Medical Practice Act at the last session of the Legislature. As your executive officer, the blame rests entirely upon me. In saying that those in charge of this matter met with absolutely inadequate support, I am animated by no desire to shift the responsibility, but solely in the hope that realizing the cause of failure we may assure success in the future. To the small band of members mostly from the Orleans Parish Society, who sacrificed their time

and comfort in many visits to the Capital, and especially to Senators Cordill and McIlhenny, and to the President of the State Board of Health, we certainly owe thanks. It seems to me we should never again attempt to substitute an entirely new Medical Practice Act for the one we have already on the statute books. Should occasion arise, let us try to amend it, making as few changes as possible at any one time. Let us endeavor to secure the pre-election pledges of legislators to support the legislation in which we are interested, by correspondence—as far as possible. But above all, let us never attempt to secure any legislation that is not earnestly desired by this whole body, so earnestly that the majority will be willing to make some sacrifice to its attainment. As a test I propose that we never go before the Legislature unless we are willing to pass a resolution calling a special meeting of the Society at Baton Rouge at the time adjudged most critical in the life of our bill. Such a meeting, the enthusiasm aroused by it, the measures taken by it, would be very likely to secure success.

Fellow-members, we cannot say how much failure in anything we set out to do hurts our standing in the public eye, but that each failure injures us we are all aware. Had the osteopaths succeeded in passing their bill, the wound to medical education, to competent medical practice, and therefore to the position of the whole profession, would have been deep and lasting. These men did not number a half a dozen; that they almost succeeded, that we had to withdraw our bill to kills theirs is not flattering to our self-respect. They accomplished what they did by giving up for the time all other things for this one object. They lived in the lobbies and by ceaseless solicitation and tireless reiteration of their specious arguments, they succeeded in winning over the legislative mind. Ante and post election promises are, after all, of minor consideration; it is the constant presence of the solicitor that secures legislative action.

I have nothing more to recommend. Besides, over-fullness, as you know, only promotes indigestion. Better to assimilate well a few important things. Nevertheless, gentlemen, my desire fairly bristles with topics to be submitted to your consideration. For instance, I might ask why we do not arouse the anti-tuberculosis leagues, the citizens of the whole State, especially those of New Or-

leans and of St. Tammany, to the irreparable injury being wrought by private greed in the ruthless felling of the pine forests of that parish, which, in little time, must transform one of the most remarkable health-zones of our country into a sandy waste. Surely, upon the basic, legal principles that: The welfare of the people is the highest law; that: You must use your own so as not to injure others, the sovereign State might so regulate, use and prevent abuse as to preserve to countless thousands yet unborn this priceless heritage.

So I might run on and on, fellow-members of the Society, until your ears ached for weariness; but to what profit if we have not yet realized our power, or lack still the energy or determination to use it?

Let us use it, gentlemen; let us bestir ourselves, take a fresh breath and a new resolution! The day must come when so large a body of men, far above the average in intelligence, education and character; coming daily in contact with citizens of every class and usually in a way to engage their admiration and respect; asking for no selfish law or privilege, but only for the highest good of the greatest number; will be able to accomplish in a sane and advancing State any legislation, or any modification of public opinion upon matters pertaining to their profession, that they may set their hearts on. Let it be our day, fellows of the Society! Louisiana should lead, not follow.

The Church and Medicine.

ANNUAL ORATION BY REV. EMANUEL DE LAMORINIERE, S. J.,
New Orleans.

GENTLEMEN: I beg to assure you that I deeply appreciate the honor which you have shown me by your gracious invitation, and I esteem the more the privilege which you have been pleased to confer, in that I feel convinced that at no period of Louisiana's history has her body of physicians, more than at the present day, been the representative of all that is most distinguished, best, and noblest in our Southland.

Hence my apprehension, gentlemen, that addressing not mere recruits in the medical field, but their acknowledged leaders, whose experienced strategy in the warfare against disease has often turned

the tide of defeat into the channels of victory, my words may lack that novelty which is a source of interest and profit. On the other hand I am borne up by the thought that old truths have become impressive by their very repetition.

Gentlemen, I crave your indulgence whilst I submit a few of those to your reflexions.

And first, as regards the aim and object of your Association, which brings together annually, I believe, from all sections of the State, the members of the medical profession practicing within its limits,—let me say that when an unflagging energy is displayed throughout the world in working out schemes of pleasure or industry or commerce or finance by thousands of societies and syndicates with every variety of means and every variety of purpose, it affords sincere pleasure and solid comfort to every true lover of poor, suffering humanity, to every sharer in its multitudinous ills,—that is to every man and woman on this world's stage,—but most of all to every dweller in our Louisiana, to see its eminent doctors meet as you have done these three days at New Orleans, to devise, in amicable discussion, the methods most conducive to its physical welfare.

We hear much in this age, of progressive unions; but I believe that I voice the sentiments of this community when I hail yours, gentlemen, as the progressive union par excellence. The interchange of experiences which form the staple of your debates, means for young and old in your glorious ranks, a progress to which no other, merely human, can be compared. The young physician imparting his doubts to his veteran brother receives from him that instruction and direction which are the indispensable elements of success in his chosen career; while the veterans themselves, sharing with each other the results of long and manifold experiments, set their conclusions upon a surer and steadier footing.

And what is that but matchless, unparalleled progress? For every onward step in the art of healing wakes an echo not only in every individual physical life which it strengthens and saves, but in every family circle which it ennobles and elevates, in every social relation which it safeguards and purifies.

But it may be permitted one of my calling to see in this meeting of your Association a union still higher, more beneficial and pro-

gressive—the union of Science and Religion. This is the coign of vantage which you yourselves, gentlemen, have assigned to my observation.

Your request that I should be amongst you to-day means more, I take it, than the manifestation of mere personal regard on the part of old friends and fellow-students and possibly pupils; it means an earnest wish that in this, as in previous gatherings of your Society, the Church and Medicine should clasp hands in a warm, cordial grasp of mutual admiration, esteem, and support.

Among the calumnies against the Church which are most persistently brought forward by infidel writers, and guilelessly accepted by their blind followers, the assertion that the Church is or has been opposed to Science holds a prominent place. It is true that the falseness of this statement has been repeatedly shown, and that no one conversant with history can at all be deceived by it; but the great mass of readers have to get their ideas of history as they can, and have neither time nor opportunity to sift the evidence and verify the accuracy of the information. Indeed many utterly false statements, like the one in question, are announced with such an air of conviction, flaunted with such a display of infallibility, that even good, thoughtful men have uncomfortable doubts lest there be some germs of truth in them. Those who adduce such mis-statements rely for impunity on the indifference of their opponents. You easily understand that the attitude of the Church to Science is too vast a subject for the limit of this address. Restricting, then, our brief inquiry to her relations with medicine, let me beg you, gentlemen, to cast a glance at the Epistle of St. Paul to the Colossians and see in what esteem and veneration your profession is held by the Church. In affectionate terms he commends the physician to the respectful regard of the nascent colony of Christians. But the words of the Apostle are only a faint echo of that hymn of praise sung in your honor by another inspired penman of the Old Law. "Honor the physician for the need thou hast of him; for the Most High hath created him. The skill of the physician shall lift up his head, and in the sight of great men he shall be praised. The Most High hath created medicines out of the earth and a wise man shall not abhor them. The virtue of these things is come to the knowledge of men, and the Most High has given knowledge to

men, that He may be honored in His wonders." (*Eccles*, xxxiii, 1-7) Golden words these! to be treasured by you, gentlemen, falling as they do from the very lips of the Holy Spirit. Could the Church, I ask, betray the trust bequeathed to her and cease to revere and honor you? Surely then, would

The pillared firmament be rottenness
And earth's base built on stubble.

No; all through the centuries of her existence, from the first to the twentieth, she has recognized your importance, heralded your advance, extolled your merits, proclaimed your excellence, taken you into her councils, and deeming you always her indispensable ally in all the measures which she adopts for the material weal of her children, has invested you with inalienable and extensive rights.

And in so doing, she but treads in the footsteps of her Divine Master. For before the days of St. Paul, at the dawn of that era which beheld the foundation of the Church, a Supreme Physician had appeared upon the scene of this sorrowing world. Christ Himself went about the highways and byways of Judea healing the material frame of those who appealed to His mercy as well as their souls which, at His bidding, were released from the fetters of ignorance and sin. And be pleased to observe, gentlemen, that He did not cure always by the sole virtue of His presence or word, but also by His touch and by His appliance of external remedies or, at least the symbols and figures of these. In these simple ministrations of the Messiah, he who runs may read a lesson. The omnipotent author of the body as well as the spirit of man, has undoubtedly dowered our common nature with immense vital forces to resist fatigue, wounds, privations, hardships; all the attacks it must inevitably encounter from neighboring agencies, all the malignant influences ever ready to prey upon it, all the ravages, even, which are so wofully wrought by the riot of its own unbridled passions; yet these forces had to be helped and supplemented by others not contained in that nature. Hence the beneficent Creator has filled air, water, plants, animals, even, with health-preserving, life-restoring principles revealed by His Providence to His rational creatures under the incognito of hazard or chance; and He has willed, at the same time, that there should be a class of men con-

secrating themselves, in a special manner, to the study of these natural forces with a view to the physical welfare of their fellow-mortals.

Such men are you, gentlemen, and such a study is, in a nutshell, Medical Science. Yours, then, is a divinely accredited stewardship in the department of the physical universe every whit as the priest's is in that of the spiritual universe; and so the priest and the physician will cease to be the most potent factors in all the problems of life only when the last human existence shall have been swept away from the face of the globe, and the fluctuations of time shall have been absorbed in the permanence of eternity.

Imagine, then, gentlemen, the folly of the man who would dare take service in that splendid army of benefactors with sordid motives! Imagine the folly of the man who would dare ambition this career solely for its pecuniary remuneration! Why, he would be as worthy of the execration of all right-minded men as the soldier who should follow the flag and fight only for pay; as the lawyer who should become a disciple of Themis only for hire; as a politician who should support a measure only for lucre; as a representative of the people in the halls of Congress who should defend the rights of his constituents only for the paltry pelf attached to his endeavors and promised to his efforts. By putting his skill upon the market and selling to the highest bidder, he would degrade one of the sublimest vocations to which man may aspire, to the level of a marketable commodity; he would cripple his energies, and narrow his horizon for reasons too obvious to need emphasizing or even proving. That such mercenaries have never found room, could never find room in your midst, gentlemen, is the testimony not only of this city, not only of this State, not only of this broad American continent, but of the entire universe, which, in the trying days of recurring epidemics, beheld your selfless devotedness which led you to place your talent and your skill at the service of the poorest and the most destitute in the expectation of no other reward than the "well-done" of an approving conscience. And I make bold furthermore to affirm that if the voices of hundreds of patients, who are the daily recipients of your charitable care, could be heard, a mighty and touching chorus would rise above the tumultuous din of this utilitarian age to teach the world that if there is on this planet

a generous, self-forgotten, disinterested body of men, that body has name: The Medical Profession of the State of Louisiana.

And am I not warranted to say, gentlemen, that such gratuitous self-spending of the physician is the first-born of that principle which you have taken as the guiding star of your lives, that religion is to your profession what the rudder is to the ship which it directs through the swelling seas, what wings are to the bird which they poise or speed, what the foundation is to the building which it upholds? Metaphors these, if you will, but which conceal in their folds, potent truths, live issues, and tremendous realities.

For strip the ship of her rudder and you have a dismantled hulk, the sport of mocking winds and waves; clip the eagle's pinions and you have a maimed thing painfully crawling and unfit to soar; sap the foundation of the structure and you have an unsightly heap of loose timber and stones; so too, sunder the Medical Science from Religion and you have laid your hands to a work of disintegration to end, sooner or later, in disaster and ruin. And the more lamentable is the ruin as loftier is the science which is wrecked. Now what is nobler in all the ample range of human avocations than the pursuit to which you devote your labor, your talent, your toilsome days and often your sleepless nights? Astronomy, which sweeps through the luminous fields overhead, tracks the stars in their course, calculates their distances, and weighs the prodigious bulk of the mighty planets; chemistry, which delves into matter, and analyses its tiniest atom; physics, which wrenches the secrets and mechanics which reduces to obedience the powers of countless bodies—all these are noble sciences, no doubt, but all massed together they are of less service to man than that which keeps watch over his very life, gives vigor to his youth, fosters the growth of his manhood, repairs his damaged health, upbears his declining faculties, and through the entire span of his earthly days, supplies those conditions without which neither enjoyment nor usefulness would be possible. That the astronomer, then, should not meet with a Creator and Lawgiver at the end of his telescope, as the famous Lalande is said to have declared; that the physicist should not hear His voice amid the whirl of his experimental contrivances; that the chemist should not find Him in the depths of his crucible, this is indeed as deplorable as it is incomprehensible, but such inference

would inflict but little harm, if any, upon humanity with which these pursuits have small contact; but let the physician ignore God or disregard His laws, and he not only cripples his energies, paralyzes his efforts, but that shock to his higher faculties recoils with dreadful effect upon afflicted humanity. It was a saying of an expert practitioner whose name is not unfamiliar to you, the renowned Baldi, that "atheism and medicine are opposed to each other as fire is to water." This aphorism seems, *a priori*, acceptable to reason. Anatomy offers to the physician an evident demonstration of God's existence, since the human organism, observes Gallien, is nothing else than a celestial hymn composed to the glory of the Creator. The insurmountable difficulties which, in the close investigation of natural phenomena, a searching and disciplined mind meets at every turn, renders it docile to divine teaching, while the sight of the mysteries which it discovers in the physical order leads it readily to acknowledge that there must be others still greater in the supernatural order. The study of chemistry, the marvels of motion, the action of matter, the character of fluids convince him more and more of the spirituality of the soul and of its immortality. The hideous ending of lives worn out by excesses of which he is so often the reluctant witness, must inspire the physician with loathing for looseness of conduct and stir within him love and esteem for religious principles. On the other hand it can not be denied that the constant viewing of man merely from the material side of his being may have led, and may still lead, some physicians of high repute to refer physical effects to wholly physical causes, and, while exclusively absorbed in the study of His incomparable workmanship, forget the Almighty Worker.

Gentlemen, time will not permit me to enter into the question whether an universal abandonment of belief in the Deity and immortality is compatible or not with eminence in your honorable profession; I can but say that our natural sentiments rise up in arms against the fatal consequences which atheism or materialism, or scepticism, or agnosticism, call it what you will, on the part of the man who is called upon to be the benefactor of our race, must unavoidably have for suffering humanity. In fact, if a physician can ever convince himself that, after all, there may not be such a thing as a higher law before which he is responsible even for his

most secret actions, then what is to prevent that man from becoming a dangerous element in the community? If he see much temporal gain on the one hand, and security from legal prosecution on the other, what will keep him in the path of duty? Duty for duty's sake, duty as an end and not a means, why, gentlemen, this is a shibboleth spurned and scorned by sound philosophy. If he can make himself believe that, for all he knows he may be nothing more than a rather curiously developed lump of matter, which is to lose forever all consciousness in death, what could prevent him from getting rid of any other evolved lump of matter, if it stand in the way of his present or prospective happiness? Why should he trouble himself about taking care of the poor, ruined wrecks of humanity who can never more be capable of enjoying life or contributing to the enjoyment of others? If the patient under his treatment be not the offspring of God, but of the earth, a mere sensitive and mortal animal, existing for a day, all the virtues which demand self-sacrifice, self-denial in his dealings with him are utterly absurd. It is very well to appeal to the sentiments instinctive in nature, but these sentiments must be capable of being justified by reason. An atheistic or sceptic practitioner can not do this. If a man is essentially the same as a brute there can not be any reason for treating him otherwise than a brute. And so in such hands, Medicine sent from Heaven to be an angel of mercy to man proves disloyal and unfaithful to its beneficent mission. It stalks abroad in open daylight, a sword-bearing, destroying spirit. Talk as much as we please of the coercive and controlling power of self-interest, of ambition, of the cultivation and pursuit of science for science' sake; nevertheless I will tell you, gentlemen, with all the earnestness of which I may be possessed, that all the crimes, and all the follies, and all the tragic miseries, and all the intrigues, and all the villanies which blacken the record of each passing month and which are so graphically detailed in all their revolting horror in the columns of our newspapers, prove beyond cavil the havoc which has been wrought, and which will be wrought to the end of time, by the passions of fallen, weak, human nature when cut loose from faith in God and fear of Him, and left uncontrolled by anything stronger than self-interest, or the desire of fame or the pure love of science for science' sake.

But, gentlemen, I am pleased to think that like Don Quixote, I am thrusting my lance at shadows and windmills; for I am aware that I am speaking to men who have made Christianity the basis and corner stone of the splendid fabric of their vocation. So, I have but to advert to the enormous influence which you wield to realize with you the import to your noble pursuit of those precepts inculcated by religion. Gifted, indeed, must the pen or tongue be which would wholly describe or adequately tell the influence exerted by the healing art over each and every one of those countless units of that vast aggregation called modern society. The famous "*ipse dixit*" of Pythagoras bent to the master's sway the wills of a handful of enthusiastic disciples, whereas to yours, gentlemen, bow the wills of multitudes. Yours fashions decisions, molds resolves, modifies or alters plans, exacts sacrifices which no other power on earth would dare impose. It spurs on to undreamt-of activity, restrains from indulgences, roots up deep-planted habits, and invading the realm of intellect turns from their course even the channels of thought. You are the chief justices of a supreme court. Your verdict is without appeal, and your sentence final. At your command, or even suggestion, homes are abandoned, ties are severed, the seas are crossed, new climates are sought, perils are braved; for, in quest of the precious boon of health no hardship is too severe, no trial too acute, no obstacle insuperable, no sacrifice too cruel, no privation impossible.

When a man's eye is clear, and his cheek aglow, and his step elastic, and his blood warm, and his spirits high; when he revels in the luxury of a sound constitution and an unimpaired frame, he may scornfully reject or deny the authority which I here claim for you; but let the hand of disease be laid upon him, let it stretch him upon a bed of pain, and the reckless giant of yesterday becomes to-day a pitiful dwarf in your hands. The cynic is transformed into an abject worshipper, and in sheer helplessness turns to your ministrations as to his only hope to escape from that dissolution before which he shudders and shrinks. You become his shield in the hour of battle with the grim conqueror whom six thousand years of strife have not unweaponed or wearied.

And the weaker is that man's hold on a future world, the more tenacious is his grip upon the present; life, at all cost, is the anxi-

ous thought of his befogged brain, the yearning cry of his stricken soul. And so he yields himself unto you a bondsman unto his masters. Gentlemen, what kingly sceptre can be compared to yours!

But your influence does not rest here. It reaches farther, ranges more widely. The holiest affections of the human heart in concert with certain necessities as terrible as they are frequent, in the thick of a depraved world, deliver into your keeping what our homes hold most secret and most sacred. You are the confessors in those households whose threshold the foot of priest never crosses. It is you and not we that rule from the fireside whither you are summoned at all hours of the day and night. To your guardianship is entrusted not only the physical life of the individual, but also the moral status, the honor, the peace of the family. The Christian practitioner scrupulously wary in the use of the freedom to which his profession entitles him becomes thus the defender of the reputation, the source of the happiness of a thousand homes. Who will dare say that talent or even success suffices to win from the patient that confidence in his doctor necessary to bring about such a consummation? No, a thousand times, no! From the man who may at any moment meet with temptations to abet a fault or a crime, from that man something more is demanded by the best instincts of the human heart than a doctor's diploma, the guarantee that he is of the type of manhood described by the Latin poet,

"Integer vitae scelerisque purus."

And such a type can be produced only by religion.

Thus the great question of health, like every other question directly affecting the well-being of mankind, leads up to this higher question. Whatever theorists may think, at least the medical practitioner who has to deal with disease in all its aspects is not ignorant of the paramount importance of this factor in the general health of men and women. He knows well that often this or that trouble of the nervous system originates in what the world terms with disgusting flippancy irregularity, indiscretion, indulgence, but what Christian Theology calls by the terrible name of sin. He sees himself powerless even with his panoply of so-called neurotic remedies in presence of an evil the real cause of which is to be found in a sphere beyond the reach of such remedies, in the weakened will

which cannot resist the temptation that besets the luxurious appetite. Reasoning with the patient is in most cases of no avail. Yet often has he marvelled at the sudden transformation operated in the physical condition of his patient by what is called a religious conversion, or by a return to religious practices, whose abandonment had been the first episode in the complete story of his patient's illness. The doctor has perhaps no time to reflect on the fact, and may content himself with exclaiming half-sadly, half-humorously: what strange machines we are! Yet taught by experience he would, in similar cases, as has often been witnessed, advise his patients to attend to their religious duties after everything else had failed him, in the hope that the same favorable reaction might follow, or at least that the hidden cause of the evil might be stopped. A French philosopher condescended to admit that there is need of religion for the people; many medical men in active practice, most of you, gentlemen, would readily admit also that there is need of religion for certain patients.

And it is this admission which sublimates your influence and makes it such a powerful ally of the Church in her unflinching endeavors to better the moral conditions of mankind. Apostles of the physical gospel, you prepare the way for the preaching of the spiritual gospel. Sowers of the seeds of health, you sow also the seeds of a higher life; saviors of the body, you become also in the truest sense the saviors of the imperishable soul which by your advice, at least surrenders itself to the guidance of our spiritual ministry.

It were idle to prove, gentlemen, that to reach this high level on which so many of your profession, throughout the world;—nay, so many in this very assemblage, stand to-day with a splendor that redounds to the honor of our cherished Louisiana it is not enough that the physician should have mastered the nature of the various ills that flesh is heir to, together with the specific properties of every drug described in works on *materia medica*; that he should have a thorough knowledge of anatomy and surgery, but that his conduct in the management of all the resources which are to his hand should be directed to procure the real welfare of his patients. To this end he must scorn the attainment of inferior advantages at the sacrifice of moral principle and superior blessings. Is this an easy task to

achieve? Gentlemen, you know it is not. You know there are moments in your medical lives when lures are potent, temptations to prevaricate many and mighty; when the voice of conscience is all but smothered by the strong grip of lurking foes that bristle up on every side demanding your lives or your purses in a very different and more perilous sense than those words bear on the lips of the highway robber unexpectedly springing upon the unwary traveller. A large fee is within your grasp if you will but slay instead of saving. Your reputation will be trumpeted throughout the land if you will but stoop to methods which your higher nature condemns, and your noble spirit bans. Follow the law of expediency created by some sudden need to screen iniquity and stave off shame, and in a minute, competency or even wealth is yours. What will you do, what can you do, gentlemen, unless you take a strong hold of your only spar of safety amid the tumbled wrecks around you, the precepts of that Religion which cry to you with a Voice from on high: Thou canst not; the voice of that Duty of which the poet said:

Stern Daughter of the Voice of God,
O Duty! Who art a light to guide, a rod
To check the erring, and reprove;
Thou who art victory and law
When empty terrors overcome;
From vain temptations dost set free;
And calm'st the weary strife of frail humanity.

Stern Lawgiver! yet thou dost wear
The Godhead's most benignant grace;
Nor know we anything so fair
As is the smile upon thy face;
Flowers laugh before thee in their beds
And fragrance in thy footing treads.
Thou dost preserve the stars from wrong
And the most ancient heavens, through Thee are fresh and strong!

What are you, gentlemen of the Medical Profession, but very stars in the firmament of this poor suffering world? And what will preserve you from wrong but the knowledge and the practice of the duties attached to the profession which you yourselves have chosen?

Gentlemen, the world has ceased to wonder at the feats of dauntless courage performed by the members of the medical profession from the brilliant specialist whose anterooms are thronged with eager and expectant crowds to the obscure practitioner painfully toiling in his daily rounds along the impassable streets or tortuous lanes of some newly settled country hamlet. Heroism is such a usual, I had almost said a necessary element in your career as to pass unheeded except when accompanied by such exceptional adjuncts as must force it upon popular attention. The sea captain who leans upon the gunwale to give the parting life-boat its course, and goes quietly down to his watery grave with his sinking ship rather than break his word to those few emigrants; the general who carves for his forlorn hope a bloody way through a column of victorious assailants; the flag-bearer who plants his country's banner upon a discrowned battlement amid a storm of lead; the gunner who sends his last shell crashing through the ranks of the enemy and falls torn and bleeding, dead by his silenced battery; these are the world's heroes voted a niche in the Temple of Fame; and yet such heroism dwindles into insignificance when compared to the heroism of the physician who, captain of a very different vessel, the vessel of a human life, stands to the last on the deck of that sinking ship; who, with throbbing pulse and aching brow, weary with watching, and faint from exhaustion, bends over the wasted form of cradled infancy, or the shrinking frame of old age, or the tortured limbs of manhood in its prime or womanhood in its bloom, in a giant effort to stay the hand of death and fan back into life the flickering flame; who, amid a storm of agony and the frantic cries of "Doctor! save him!" victorious standard-bearer plants the flag of life upon the wrecked heights of disease; who, having sent his last message to the enemy, his last prescription,—falls a victim to the plague whose invasion he has successfully repelled.

With such traits history is replete, while the greater number unrecorded in the chronicles of men are glassed in God's immeasurable memory. Yet far above this physical heroism of the physician, as far above it as the heavens are above the earth, is that other, the moral heroism of which I spoke guardedly, it is true, but intel-

lightly, I trust, both as to the principle which inspires it and the detailed application of that principle in your daily practice.

Continue to blend that twofold heroism in the exercises of your high, your sacred calling, gentlemen, and true to your conscience, you shall be hailed in the future, as you have been in the past, the peerless benefactors of our kind, the impregnable bulwarks of our modern civilization, the unshakable props of our social and domestic institutions, the hope, the pride, the boast, the glory of our Southland, and when you have passed from the scenes of your earthly triumphs and earthly benefactions, chivalrous champions of the grandest of all causes, the cause of suffering, stricken humanity, your names and your deeds, gentlemen, forever imperishable, shall rest an unfading crown on the fair brow of our Louisiana!

Orleans Parish Medical Society Proceedings.

President, DR. JOHN J. ARCHINARD. *Secretary*, DR. AMEDEE GRANGER.
141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. AMEDEE GRANGER, *Chairman*.
DR. HOMER J. DUPUY and DR. E. O. TRAHAN.

MEETING OF APRIL 27, 1907.

DR. HOMER DUPUY presented

A Case of Tic Douloureux, Treated by Osmic Acid Injection.

Mrs. B. L. W. F., aged 28, for six years has had tic douloureux on the left side, the pain radiating along the supraorbital infra orbital, inferior dental, and posterior palatine nerves. The attacks recurred several times a year, lasting from three to four months, the intermissions were therefore of short duration, and she had scarcely recovered from one attack before the other set in. Her general health had thus been seriously undermined. During the

paroxysms her sufferings were almost unbearable. Not infrequently she resorted to morphin. But for her religious beliefs she thinks that self-destruction would have been sought to end her anguish. During the paroxysms she scarcely tasted food, and refrained from speech, as any movements about the mouth would hasten and aggravate the attacks. Almost every tooth has been removed for curative purposes. During these attacks an eruption on the skin, covering the painful areas and over the mucous membrane lining the left half of the hard palate, would invariably appear.

This was particularly marked over the left cheek, which had a ruddy and shiny appearance. (I have observed this phenomenon in several cases of severe infra-orbital neuralgia).

She first consulted me on April 2, 1907, when I had occasion to witness repeated paroxysms, and can testify to their severity. As she had run the gamut of various treatments from osteopathy to legitimate medications, I decided to try osmic acid injections, which had already given me splendid results in cases of neuralgia, limited either to the supra or infra-orbital nerves. On April 8, 1907, under ether, I exposed the two branches just at the dental, formerly mentioned, also the inferior dental and the posterior palatine at the palatine foramina, injecting into each nerve trunk approximately 3 to 4 minims of a 2% osmic acid solution, and 4 to 5 minims into each foramen. Immediately after the operation there was clear cut and absolute relief from pain. I present her to you with not a vestige of the tic remaining, and with a total absence of the cutaneous eruption over the left cheek.

DISCUSSION.

DR. MCSHANE: Dr. Dupuy is to be congratulated upon the splendid results obtained in a case of such agonizing intensity and of such long standing. While Dr. McShane has not had an opportunity for quite a number of years to treat cases in general practice, he could distinctly recall a case of pitiful and intense supra-orbital neuralgia that was in his ward in the Charity Hospital, in 1884, or 1885. The patient was a well-built mulatto, about 30 years of age, whose attacks of neuralgia were accompanied by swelling in the affected region, which lasted only as long as the

pain. Not finding the patient improving under ordinary medication, he referred the case to Dr. P. E. Archinard, under whose care a neurological clinic had just been organized. Dr. Archinard injected osmic acid into the supra-orbital foramen, and the neuralgia was quickly cured. One year later, the patient was heard from, and there had been no recrudescence of the affection.

In regard to the supposed caustic action which Dr. C. C. Bass ascribed to osmic acid, and to which he surmised that a part at least, of its beneficial action was due, Dr. McShane could not class osmic acid with such a caustic as chromic acid, but thought that its effect was due, in a measure, to its action on axis-cylinders of the nerve fibres as well as on the medullary membrane. When he was assistant to the late Dr. H. D. Schmidt, for many years the Pathologist of the Charity Hospital, he stained many preparations of nerve fibres with osmic acid for Dr. Schmidt. The osmic acid stains fatty matter black; and Dr. Schmidt prepared normal nerves as well as hundreds of sections of the liver, kidneys and hearts of yellow fever victims, in order to display the fatty degeneration of those organs. The fatty matter of the medullary membrane is stained intensely black, and such alteration must certainly affect nerve-action, either for good or ill, apart from its coagulent action on the protoplasm of the axis-cylinder. When the cause of the neuralgia is central, we can not hope for any decided effect from peripheral applications of osmic acid, or anything else.

DR. HUMMEL: In regard to the eruption mentioned by Dr. Dupuy as accompanying the neuralgic condition, and concerning the nature of which he expressed some doubts, I think this phenomenon was merely a manifestation of trophic disturbance in the function of the nerves involved—a kind of herpes. Such eruptions not infrequently accompany profound inflammatory involvement of peripheral nerves. It is now the opinion of neurologists that practically all neuralgias are cases of neuritis. I dare say this explanation must have suggested itself to the doctor's mind.

DR. J. J. WYMER read a paper entitled

**A Review of Cancer, with Report of Two Cases
being Treated with Trypsin.**

Of the many medical and surgical problems with which we have

to deal, perhaps the one subject of cancer has caused us more embarrassment than any other.

Owing to the large number of victims it claims annually in this country, and throughout Europe, research hospitals endowed with millions of dollars and equipped with the smartest medical knowledge of the day, have been on the hunt for the positive etiological factor in the production of this disease, and the possible treatment whereby a cure can be obtained that will stand the test of severest criticism.

The mortality from this one disease will soon equal that of tuberculosis, for it is an undisputed fact that cancer is on the increase in the United States as in other countries. The possibilities of what this one disease will do in time will be clear to any one who has had much experience in medicine.

Cancer may be defined, as a malignant tumor that tends to spread or persist, without filling any physiological function, having no typical termination, and when eradicated at its site, will give rise to recurrence in the scar or metastasis.

It may have been an innocent or benign tumor, or it may become an innocent or benign tumor; the possibility of conversion of one into the other is an established fact.

As usual every one of the investigators are looking for the germ of this disease, and when Doyen first described the *micrococcus neoformans*, and associated it with malignant neoplasms, as being the causative agent in the production of cancer there were supporters on one side and contradictions on the other which will exist in medicine until the end of time.

W. L. Rodman thinks that the presence of this organism has some part to play in the development of malignant growths.

In support of the germ theory, Jensen made a series of experiments on mice, as follows: in a cage containing one hundred mice, one was placed which was infected with cancer; in the course of time every mouse in that cage developed cancer. In another cage in the same room was placed one hundred healthy mice and kept in the same conditions for the same time and not one developed the disease. From these observations cancer appears to be a contagious and not infectious disease. Still another fact that presents itself daily is the rarity with which operators are affected with

cancer, and yet many have cut themselves during the extirpation of a case.

In other experiments in which Jensen has successfully transferred the growth, appears to have been nothing more than a successful case of grafting.

Kelling believes in the double theory that the heteropic cells of malignant neoplasms are embryonal in nature, and that these cells enter man from animals through the alimentary tract. He reports experiments made with hen's eggs. The inhibitory influence of the secretions of the body have no influence on these outside cells, and they continue to develop giving us the malignant neoplasm.

The blastomycetes have been grown in culture and injected into animals and give rise to granulomata which would undergo spontaneous cure. The blastomycetes could be cultivated from the air.

Recently we were given the theory by Dr. John Beard, perhaps the most rational to work on of any yet exposed. Owing to the lack of space and the freedom which this subject has been discussed in the medical press, I shall not dilate on same here. This is the last theory on which a treatment has been based.

The latest theory of cancer is that of Jacobson, in which he takes in account both the Cohnheim and parasitic theories; he fails however, to give a treatment, and what good is the theory if we are unable to base some form of treatment.

Personally, I am of the same opinion as Serkowski and Maybaum, who believe that we are about as near the etiology of cancer as was Hippocrates.

In the diagnosis of malignancy when operative procedures are contemplated, the greatest care is necessary in order that we may not sacrifice or endanger life, and the absolute necessity of confirmatory examinations is imperative. This was plainly shown in a paper read before the Louisiana State Medical Society by Dr. Michinard, of this city, in which microscopical examination showed uterine scrapings to be malignant and a hysterectomy was performed and the patient died.

In order to get an intelligent and positive report the pathologist should be provided with a section of the tumor itself. Of course it is a question in many cases where the cases are so far advanced that the character of the tumor is almost labeled in large type.

Even in these cases it would be well to have the microscopical examination made. The microscope here becomes indispensable to the clinician.

Ever since cancer made its appearance in the human race somebody had a cure, and, strange to say, that of the great number of cures that have been discovered we are still looking for a cure. Surgery ranks all treatment, both in mortality and cures, and it is needless to say that the former far outnumbers the latter.

X-Rays has been proven a failure in such a large majority of cases that it has been abandoned except in the hands of a few enthusiasts, who still report cures.

Doyen's serum came up like a rocket, exploded and fell like one.

Methylen blue injections have never been thought enough of to be given a fair trial.

Cataphoresis has proven satisfactory in the treatment of superficial epithelioma, and I desire to state that combined with surgery I had the pleasure to assist in one successful cure by these combined methods of a round celled sarcoma of the arm. After cataphoresis by Dr. Granger and disarticulation by Dr. Batchelor, the patient has no apparent return of the growth after a lapse of two years. The technic of this method is not difficult, nor is the apparatus for its use expensive, but the cures by it are not numerous enough to give it universal support.

Following this, and probably the last, we have the treatment by trypsin as suggested by Dr. Beard. This treatment is probably undergoing the severest dissection of any treatment in late years. Owing to the ease with which this treatment can be applied there is no wonder at its being so universally used, for any one who can give a hypodermic injection can give this treatment.

The first apparently successful case treated in this city by this method was exhibited by Dr. Dupuy before this Society at our last meeting.

Spontaneous cure of malignant neoplasms do occur, and this is vouched for by Dr. Harry Gaylord, who reports two cases of malignant neoplasms of the face which were cured by the extraction of teeth.

C. Jacobs and Victor Goets believe that the toxins derived from the *micrococcus neoformans* would be of service in the treatment

of cancer and shows how the proper injections based on the opsonic power of the blood would give rise to the immunization curve seen in the opsonic treatments.

William B. Coley reports 10-12% of the cases (inoperable) can be cured by injections of the *Bacillus prodigiosus* and *Streptococcus erysipelatus*.

The following two cases are being treated by the trypsin method, and I leave you to judge if there has been any improvement worthy of consideration.

Case 1. Inoperable carcinoma of the cervix, involving broad ligaments, vaginal wall and body of uterus. The above diagnosis was made clinically and section taken for confirmation by the microscope was positive. Patient was much emaciated and showed a marked cachexia, and was unable to leave the bed; there was marked glandular involvement in the inguinal region, the glands being very tender on palpation. There was a constant, sero-sanguinous discharge, very fetid and the patient suffered incessantly. Owing to the extensive infiltration the case was considered inoperable and she was transferred to the surgical service from the gynecological to await the end which was not considered far off.

Through the kindness of Dr. Danna I was enabled to try the trypsin treatment, and on January 2, 1907, I gave five minims in the subcutaneous tissue of the thigh. Jan. 4, six minims followed in five hours with intense abdominal pain, nausea and vomiting, and constipation. This condition lasted well into the next day, despite the fact that the bowels moved freely in the meantime. Patient afterwards informed me that she had had several such attacks previous to her admission to the hospital.

Jan. 8. Pains entirely gone and the patient slept well the night previous.

Feb. 5. All pains having disappeared and the patient having gained strength she was gotten out of bed. Between the beginning of the treatment and this date the patient has been receiving injections every other day with an increase of one minim each time.

March 1. Examination by vagina disclosed a soft cervix, which does not bleed and which gives no pain during the examination.

Blood Count:

	Beginning of treatment.	Present.
Red blood cells per c. m. m....	3,200,000	4,984,000
White blood cells per c. m. m....	10,000	9,150
Hemoglobin estimation	60%	

After injecting twelve tubes, or ampoules, of trypsin, this ferment was alternated with amylopsin, an injection given every day.

Case 2. Diagnosis the same as in Case 1, and clinically diagnosed by Dr. Cocram and microscopically substantiated by the pathological department of the Charity Hospital.

Before this patient was discharged from the hospital the actual cautery was applied to the ulcerated cervix uteri, I suppose to control hemorrhage.

January 4. I saw patient on this day and obtained her consent to use trypsin, and accordingly started with 10 minims in the same location as in the first case.

Jan. 6. After an injection of 11 minims there was a slight febrile reaction, preceded by a chill and attended with a very profuse discharge of sero-sanguinous fluid. To overcome the anemia as much as possible I ordered tincture of chloride of iron, in ten drop doses, to be taken in water before meals.

Jan. 14. The patient has a better appetite, actually craving for food.

Feb. 8. Began to alternate with amylopsin, giving a whole ampoule at a dose.

March 10. The patient has been receiving treatment every day and her condition has remained unchanged, except that she is able to attend to her household duties. There is a pain in the back, just below the renal region, similar to that which she first suffered before consulting a physician.

April 2. No treatment has been given in the interval, as the patient desired to rest from the pain she suffers, the result of each injection.

Her normal menstrual period appears about the 18th of the month, and at this date she always has a slight flow of blood, which lasts for about three days.

In conclusion, I wish to state that my observation on these two cases has led me to believe that there is a marked improvement in

the general condition of these two cases, and while I do not desire to have any one form an opinion regarding me as an enthusiast of this treatment, I firmly believe that these are two good illustrations of the favorable changes which can be accomplished, and while I am forced to acknowledge that I have abandoned treatment in three cases, I still believe that the treatment is of some service, and should be given a trial.

DISCUSSION.

DR. JACOBY asked whether trypsin had been tried in the bad cases of phthisis pulmonalis. From the general physical improvement shown in the cancer cases by its use, it seems that it would be of benefit in those conditions.

DR. A. NELKEN read an abstract of a paper entitled "*Acute Spermatocystitis*."

Acute infections of the seminal vesicles is too often unrecognized by the general practitioner, who is accustomed to diagnose such conditions as "inflammation of the bladder". Even the genito-urinary specialist is frequently guilty of calling such conditions "acute prostatitis" when, as a matter of fact, the prostate may be only a complication of the trouble in the vesicles. The essayist quotes Fuller to show that every infection of the vas, the epididymis or of the testicle as a complication of gonorrhea, must be accompanied by involvement of the corresponding vesicle, since the anatomy of the parts is such that the infection to reach the vas deferens must pass through the vesicle.

The difficulties of rectal examination have been much exaggerated. Practice is the chief requisite, and failure usually comes from lack of experience.

The crucial test of infection in the vesicles is the presence of pus in the contained secretion. The essayist offers an original method of obtaining this secretion uncontaminated, which method consists briefly of introducing a catheter into the bladder, and by irrigating freely before massaging the prostate and both vesicles in turn, obtaining their contents unmixed with other secretions. He dwells upon the importance of rectal massage in the treatment

of this and allied conditions, and suggests that the prognosis of acute spermato cystitis, whether alone or complicated by perivesiculitis or prostatitis is generally good under intelligent treatment. He summarizes his results after an experience with about 300 cases of vesiculitis, 1/3 of which were acute in type.

DISCUSSION.

DR. LAZARD: Dr. Nelken has presented the subject of acute spermato cystitis in a first-class paper. As the chronic form is not under discussion I shall try to confine my remarks to the specific subject.

In about 15% of the cases of gonorrhea in my experience, this condition makes its appearance, manifesting itself by pain in the region of the bladder and rectum, dysuria; and constitutional symptoms, more or less temperature, anorexia, constipation, some subsidence of the discharge.

The diagnosis is made by palpating the vesicles and excluding bladder tests, etc.

As to what is the best method of outlining the vesicles will depend on the choice of the operator. I prefer to have the patient with the legs apart and bending over a table, with the chest on the table. A glass is held by the patient to collect discharges, which are later examined by the microscope. In this position the abdominal mass crowds down on the bladder and facilitates the approach to the vesicles by the finger in the rectum. I have not found finger extension appliances of any value. The first two or three rectal examinations are painful and distasteful, but these objections are afterwards overcome.

The treatment in all cases is the same—antiphlogistic—varying only in details. The treatment to the urethra is discontinued as long as the painful symptoms last. We must not forget that retention of urine may not be due entirely to the condition under treatment. Suppositories containing opium exert some influence in this direction.

While I am on this subject reference must be made to two cases of the chronic form.

A man, 40 years, presented himself with a fistula on the right side of the anus and for which two operations had been pre-

viously performed without any improvement. At no time were there feces or gas expelled from the fistula. A thin purulent fluid exuded since the appearance of the fistula. A probe was introduced and this was found to pass outside of the rectum very high, but could not be induced to enter the gut. The probe was not under the mucus membrane as in fistula in ano. As he had suffered two years an attempt was made to follow the sinus outside of the rectum. The anus was dissected on the right side, and this with the rectum was turn down and to the left, the incision being continued to and in the mid-perineal line. A modified Dittel incision for prostatectomy. On introducing the finger the right vesicle was found to be distended, which was ruptured, a very foul pus was discharged. He made a recovery from the operation, but died 3 months after. Two years of suppuration and wide infection was more than he could stand.

In one other case, man 27 years, the same condition was found and the same operation performed, the case was not as extensive or as long standing as the first case. He made a prompt recovery. He has not had any trouble since. I believe the right vesicle is more often infected than the left.

Surgeons having supposed cases of fistula-in-ano without any internal opening should take this condition and prostatic abscess with rupture in the perineum into consideration.

Eugene Fuller has devised an operation and a special table for vesiculectomy, and reference to his article will convince anyone that pus tubes in the male are serious affairs.

DR. CHALARON: I want to ask Dr. Nelken if he has ever met with cases of epididymitis without involvement of the corresponding vesicle?

DR. NELKEN: No.

DR. CHALARON: Then I must take exception to Dr. Lazard's statement that the right vesicle is usually the one affected. In my experience the left vesicle has been the one most frequently affected.

DR. NELKEN, in closing, said that he desired to thank the gentlemen for the flattering manner in which his paper had been received.

The subject was one of great interest to the man in general practice as well as to the specialist.

In answer to the question, he thought it rare that the onset of

an epididymitis could be prognosed from rectal examination. A patient might have an infection limited to the anterior urethra at night and swollen testicle the next morning. He had, however, seen a case in which he had correctly foretold the onset of an epididymitis, because on rectal examination he had found an acute vesiculitis and an inflamed and distended ampulla of Henle.

In replying to another question, he had tried to make it clear in his paper that the anatomical arrangement of the vas deferens and the vesicle was such that it was probably impossible for pus to invade the testicle without infecting the corresponding vesicle. In examining the secretion from the vesicle under the microscope, he desired to call attention to the care necessary to avoid confusing the normal epithelial cells with pus cells. A point in the differentiation was that the pus cells were about one-third smaller and stained darker with an iodo-iodine solution than did the epithelial cells.

N. O. Medical and Surgical Journal

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The Medical Journal.

The medical press has occupied such an important position with reference to the advancement of the medical profession that space might be spared here for the discussion of the scope of the medical journal in its various attitudes.

There was a time when the study of medicine was accomplished only by the traditional contact of the pupil with the master in the dissecting room and at the bedside and the texts were few and filled with the theories of the individual mind of the scholar as he might have viewed the subject he discussed. With the advancement of medical knowledge the texts increased in number and gradually involved the opinions of others than the writers of such, but it was not until the advent of the medical journal that the knowledge of the clinical experiences, differential theories and exact investigation was disseminated to the students among the active physicians.

The evolution of the medical journal from a small beginning to its present multitudinous appearance has been comparatively rapid as it has been demanded by the wonderful advances in all the departments of this science. Not only has the medical journal educated thousands of the votaries of Æsculapius, but it has divided itself into special fields until to-day no branch of surgery or of medicine, either in its exact fields or in the anomalies of its expression, has been neglected. Everywhere the student of medicine finds that his chief education is in the perusal of the medical periodicals, while the text-book, in its revised appearance from time to time, only summarizes advance as dictated by the published experiences of the medical profession.

It is within the recollection of even the present generation of medical men that medical journals were wont to solicit contribu-

tions from the profession, but to-day the aggressive advance along all experimental lines, exact methods of experimentation in clinical work, and the broad observation of the student at the bedside and in the laboratory have supplied the material from which the best is now selected for publication.

The past ten years has seen the gradual subsidence of the medical journal which existed solely for the medical advertiser and whose pages were filled with encomiums of remedies which lived only so long as the advertisement bore fruit. Competition among medical journals aiming at a high purpose has accomplished this result and to-day there are fewer medical periodicals and among these the standards in literary merit, medical acumen and in usefulness to the individual reader are found to occupy chief place.

The development of a national journal, the organ of the organized profession, has been accepted generally and in the two great English speaking countries are now found exemplary publications covering all fields of medicine and of surgery and highly satisfactory to the profession as a whole. The future of the independent medical journal must depend upon its usefulness to its constituents and there is no doubt if this is fulfilled along the lines of the stimulation of high class scientific work, the editorial discussion of the presenting exigencies of the local profession, the consistent demand for high grade medical education and, above all, the maintenance of a standard of clean medical advertising, the future of sectional medical periodicals will be assured for all time to come. A national journal must, of necessity, generalize and its pages can at no time reflect either sectional or partisan interests; its purposes must be for the crystallization of the profession as a whole, and it should not interfere with the independent medical journal which is clean in its methods and which aims at the advancement of the profession in the district to which its issues go.

Much of the success of the local journal is directly dependent on the support of the profession which it is intended to voice, and where that profession is earnest in its work, serious in its purposes, the journal should attain a standard to be recognized everywhere. As yet our local journal has not failed in this, and if the past fifteen years may be considered indicative of the future, the scientific work of the state of Louisiana and of the city of New

Orleans will be only an expansion in glorious perspective of what has been already done.

There is no contingent in the medical profession in the South which can aid more in furthering the usefulness of the medical journal in this section than the men associated with the daily work as visiting physicians and surgeons to the New Orleans Charity Hospital. They stand for the nucleus of the scientific work which has been born in the wards of one of the greatest institutions of its class in the United States. The Charity Hospital affords a wider opportunity for original research, for scientific observation and for the exact record of morbid conditions than any other element in this section, and it rests with the visiting staff of that institution to see that a narrowness of administration shall yield to the demand of the times and that the near future may witness such a reorganization as will put the Charity Hospital on the same plane of usefulness as now exists in Baltimore at the Johns Hopkins' Hospital, in Montreal at McGill, in Philadelphia at the University of Pennsylvania Hospital, and in Liverpool and London, where opportunities are afforded and not restricted, and where the results of scientific and original work go out through the medical press to the wide, wide world.

The Medical Department of Tulane University of Louisiana.

The friends of medical education in this country, and especially in the Southern States, must be glad to note the accomplished reorganization of the Medical Department of Tulane University. Of even more interest are the proposed changes beginning with the session of 1908-1909. In the first place the Board of Administrators of Tulane accomplished the establishment of a post-graduate medical department and, in this, created an advance in teaching methods not yet attempted by other universities. Post-graduate medical teaching, in most places, has been quite independent of regular university curriculums, and for Tulane this step is an especial recognition, first, of the fact that New Orleans is a great medical center, and second, that a great university can only assist

its own standard and reputation by expanding into broader methods.

The Post-graduate Medical Department of Tulane was inaugurated last October by the election of the former New Orleans Polyclinic and its entire Faculty to the several professorial chairs in this division of the Medical College. The Polyclinic needs no extended remark here, for it has occupied a distinct and distinguished position in the South since 1888, when it was inaugurated. With a Faculty of twenty-one professors and twenty-six lecturers and assistants the Post-graduate Department bids fair to supply the needs of practical education for physicians of the South who must look to New Orleans as the Mecca of medical opportunity.

The Undergraduate division of the Medical Department of Tulane has been completely reorganized. Its standard is consonant with other great medical institutions in the country, and it has responded steadily to the demands for higher standards as time has gone by. With the coming year the Faculty is to be increased by six, or more, professors, and the teaching improved by the expansion in the opportunities of the associate professors and the lecturers and assistants.

In 1908 the first two years of medical instruction are to be given at the new laboratories and buildings to be erected upon the University campus, the last two years to be applied to more extended clinical and practical teaching at the present buildings, near the Charity Hospital.

The analysis of the future schedule of the Department shows a total of 3,960 hours for the four years. Of this about sixty per cent is devoted to practical, clinical and laboratory work, and forty per cent to didactic teaching. This compares most favorably with the hours required by the best schools in the country.

The recent analysis of the reports from the various state boards of medical examiners for the past three years places Tulane in no unsatisfactory light. The *Journal of the American Medical Association*, commenting on the results of these examinations, states, that of the sixteen largest schools—those having 100 or more examined—eight had less than ten per cent of failures, and it is pleasing to note that in this eight Tulane ranked fifth with 5.9% of failures.

The JOURNAL feels that so many of its readers have ties of attachment or of friendship for the Medical Department of Tulane

that any review of its work or indication for its improvement is acceptable information. We may add our own interest and gratification for the changes which have been brought about. The JOURNAL has always stood for the improvement of the advantages of New Orleans as a medical center, and it has also championed improved methods of medical education. It is to be hoped that the above changes noted may prove the harbinger of a great future for Tulane University in all of its departments.

Sanitary Work on the Isthmus of Panama.

Unusual interest in the Isthmian Canal has been displayed by New Orleans, the State of Louisiana and the whole South during the past few months, and it must be a matter of supreme satisfaction to read the results of the sanitary work done by Col. W. C. Gorgas, U. S. A., of the Commission, and his assistants, during the past three years. This is graphically told in the *Medical Record* for May 18, 1907.

Dr. Gorgas reviews the conditions which have obtained since the initial attempt on the Isthmus by the French, and it is easy to contrast present health statistics with those under the administration of the French. At this time there is an excellent hospital system throughout the entire zone, the chief points being at Ancon, Panama, Colon, Cristobal and Empire, with subsidiary hospitals all along the railroad route. At the time of the United States' occupancy most of this district was in a horrible condition, the city of Panama being without a water supply, and the country between Panama and Colon being overgrown with tropical weeds, undrained swamps, all affording multitudinous nests for the development of the mosquito pests and their consequences. Yellow fever, plague, beriberi and, above all, malaria, were prevalent to an alarming extent. Now, yellow fever is almost never seen excepting when brought to the quarantine stations; malaria is held in check, and the recent report of morbid conditions shows a hospital record of less than 20 per thousand, which would compare favorably with any similar enterprise in the United States.

These things have been brought about by the thorough draining of the Canal Zone, the destruction of noisome weeds, the supply of

good water, and the organization of a hospital system, together with the thorough screening of all habitations occupied by canal employees and the officials. When it is considered that the Canal Commission has introduced a force of some 40,000 people, and that the health of the Canal Zone has been improved under sanitary measures completed within three years' time, we feel that the credit for all of this must be given where it belongs, and history should make record of the names of Col. W. C. Gorgas, U. S. A.; Major Jno. W. Ross, U. S. N.; and Dr. Henry R. Carter, of the U. S. P. H. & M. H. S.

Their assistants also need mention in the detail work, and these are especially to name, Drs. J. C. Perry, Jno. H. Purnell, E. H. Wheeler, and others.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In Charge of DR. F. A. LARUE, Assisted by DR. P. L. THIBAUT, New Orleans.

RESECTION OF INFERIOR MAXILLA AND IMMEDIATE PROSTHESIS. Mr. Vallas, in *Revue de Chirurgie* (Dec. 10, 1906), presented before the Surgical Society of Lyons a young man from whom he had resected half of the lower jaw for sarcoma, followed, on the advice of Mr. Martin, by immediate prosthesis.

As usual, he did not cut the orbicularis oris, preserving likewise the muscular girth formed by the masseter and internal pterygoid. Result excellent.

Mr. Martin removed the provisional apparatus on the twelfth day, earlier than is customary. The result is none the less quite satisfactory.

Mr. Gangolphe stated that he had resected the maxillary for osteosarcoma, the patient remaining well four years after.

Mr. Nove-Josserand said he had obtained some very beautiful results with Martin's apparatus, after dis-articulating the inferior maxilla. Too much stress cannot be laid on this real advance.

LATERAL LIGATURE OF THE AORTA—MESENTERIC TUMOR.—MR.

Bévard (*Ibid.*) exhibited to the members of the same society a large tumor recently removed from the mesentery of a woman æt. 60 years.

Apparently a multilocular ovarian tumor, it proved to be a solid growth of the mesentery, adherent to the aorta, *torn laterally* on making traction.

Profuse bleeding was controlled by a provisional ligature of the lumbar aorta. A lateral ligature having finally been applied to the aortic tear, the temporary ligature was removed.

The circular ligation of the aorta is in fact very serious. Even on the lumbar aorta complete ligation was followed by death in all cases reported by Tillaux and Riche in the *Revue de Chirurgie*, 1903. This procedure was accordingly discarded. There remained the lateral ligature, which seemed dangerous and difficult, but which finally acted well. The patient recovered notwithstanding an extensive denudation, exposing the duodenum. The tumor was evidently undergoing some degeneration, although no histological examination had been made.

Department of Obstetrics and Gynecology.

In Charge of DR. P. MICHINARD and DR. C. J. MILLER, New Orleans.

THE ANATOMY OF EXFOLIATIVE MENSTRUAL ENDOMETRITIS. (Ascheim, *Archiv. für Gynökol.*, Band LXXX.) The author believes that the membranes found in dysmenorrhea are due to an exudative endometritis, present at the time of menstruation. The membranes vary a great deal in structure. They mostly show fibrinous matter, stroma cells, glands and remains of mucous membrane; decidua cells have been found. Virchow's nomenclature, "decidua Menstrualis," is of course correct, "dysmenorrhea membranacea" is not suitable, as the periods are sometimes painless; but endometritis exfoliativa is, anatomically speaking, the best name for this condition. The etiology of the disease is not known. Heredity seems to play a part. Pain may be intense, but is not a constant symptom. Sterility is frequently

complained of. The prognosis of a lasting improvement is bad. Relief may be obtained from curettage, hydrotherapeutics, and drugs, such as hydrastis, ergot, etc., but no definite cure can be expected until the etiology of the disease is known.—*Jour. Obst. & Gynec. of British Empire*, February, 1907.

INTERNAL DISEASES AS INDICATIONS FOR THE INTERRUPTION OF PREGNANCY.—Warfield (*Interstate Med. Jour.*) lays down the following principles as regards tuberculosis:

1. Tuberculosis of the larynx is a very grave complication of pregnancy, and is a justifiable indication for its interruption. To be of value it must be done in the first two months of pregnancy.

2. In advanced cases of tuberculosis of the lungs in pregnant women abortion is not justifiable. The exhaustion following it differs very little from that of the normal puerperium. The child in such a case should be our first care.

3. In early tuberculosis of the lungs, if the process is advancing and the woman losing weight, and if she can be put under the most favorable surroundings, there might be a justifiable indication for its interruption.

4. In early tuberculosis with the process apparently stationary, the patient should be simply kept under observation. There seems to be only one rule, if abortion is performed it must, in all cases, be done as early in the pregnancy as possible.

BACTERIOLOGY OF PUERPERAL WOUND INFECTION.—(Hellendahl (Tubingen) *Zentral. für Gynökol.*, 1906.) The author has proved experimentally that bacteria can penetrate the intact amnion and infect the amniotic fluid. The germs multiply between the wall of the uterus and fetal membranes, and spread outwards, and also through the membranes into the amniotic cavity. Infection of the latter can take place via the Fallopian tubes from the peritoneum. This occurs by continuity of tissue and penetration of the membranes, and not by the vascular system.

Infection of the amniotic sac from the uterine vessels plays only a subordinate role; on the other hand, infection of the amniotic fluid from the placenta is a well established fact.

The fetus may become infected through swallowing amniotic

fluid, through premature respiration, and through spontaneous immigration of bacteria into apertures of the fetal body.

The lungs are the principal gateway to general infection, but the latter can occur through the digestive tract and through section of the cord.—*Jour. Obst. & Gyn. of British Empire*, January, 1907.

Department of Internal Medicine.

In Charge of DR. E. M. DUPAQUIER, New Orleans.

PLAGUE IN JAPAN.—Kitasato, the well known Japanese professor read, at the meeting of the American Society of Tropical Medicine, in March, 1906, a paper on "Fighting Plague in Japan," the conclusion of which will bear repetition at the present moment, as the danger of plague is always hanging over us like that of yellow fever.

The fatal pestilence, however obstinate in its ravages and terrible in its effects, can be fought and vanquished by persistent efforts of man. Human endeavors backed by money, will not accomplish much unless directed by wisdom and based on scientific applications.

The danger of intrusion of plague through open ports must increase in proportion as international commerce progresses and maritime enterprise advances. Where man fixes his abode the rat tribe accompanies him to share it; and the unwelcome creature becomes the cause of the dreadful evil. In ports where vessels from infected regions frequent, an epidemic of pestilence may not be difficult to fight out. But if it should be that ravage after ravage is going to be spread through fresh causes of importation, the task becomes rather cumbrous, involving the expenditure of vast amounts of money and tedious efforts. In regions like India and South China, plague appears to be deeply rooted, prevailing almost incessantly for several years, and producing each year more than 200,000 patients. It is apparent that we cannot avoid the danger of intrusion of the pestilence at any moment so long as we do not cease intercourse with these regions. To be content

with merely placing quarantine on the incoming vessels from these places, or enforcing rat killing sanitary measures in the open ports, seems to me a very poor means. Why not extend them to the source of the danger and destroy the cause of the evil permanently? Plague is not only objectionable to the people of one locality, but it is an enemy of mankind. All the civilized nations have to fight this common enemy. I believe that there ought to be an international conference to discuss a plan, collect money, and organize an international army to fight and vanquish this disease from the surface of the earth. The expedition should be sent to the regions of India and South China. The expense needed for such an enterprise would be only a small part of what the civilized nations are spending for their armies and navies; or the money spent in every country would suffice for the preventives of the pestilence.—Transactions, 1907, of The American Society of Tropical Medicine.

Department of Ear, Nose and Throat.

In Charge of A. W. deRoaldes, M. D., and Gordon King, M. D.
New Orleans.

A NEW METHOD OF AURAL MASSAGE.—Dr. J. C. Beck, in a paper read before the Chicago Otological and Laryngological Society, described a method originated by himself, of effecting massage of the tympanic membrane and ossicles.

The ingenuity of the method deserves attention, and for those who are professed believers in aural massage it is well worthy of trial. The procedure consists simply in introducing a certain quantity of metallic mercury into the auditory canal, which by its weight and movement in contact with the tympanic membranes produces the massage effect. The author considers it less painful and more efficacious than the use of the Lucal probe, and reports cases in which the tinnitus aurium especially was relieved.

KOPLIK SPOTS IN MEASLES.—Dr. G. Longworthy, of Dubuque, in the *Medical Record*, October 20, 1906, writes of the importance of recognizing these lesions of the mouth as an early symptom of measles. The spots are found on the mucous membrane, near

the corners of the mouth, and about the gums, and are of a bluish white appearance on the normal red background of the mucosa.

Koplik claims that they precede the skin eruption by five days, and disappear when the exanthema becomes visible, and thus offer means of earlier diagnosis. They are not to be mistaken for aphthous patches, which are rounded whitish ulcers with an inflamed areola.

Medical News Items.

THE ATLANTIC CITY MEETING OF THE AMERICAN MEDICAL ASSOCIATION—The fifty-eighth annual meeting of the American Medical Association at Atlantic City, June 4 to 7, inclusive, was highly satisfactory both as regards the work done and the number in attendance, though in this latter respect it fell short of the banner meeting in Boston last year, where some five thousand members were present, against a total of only 3,800 at this session of 1907. In passing, it may not be out of place to note the practical significance of these figures as indicating the superior attractions which Boston, a world center of literature, art and learning, rich in historic interest, evidently offers to such an intellectual body as the American Medical Association, compared with the charms which Atlantic City holds forth. In making this comparison it must also be remembered that the trip to Boston was longer and more expensive to most of the members, and that on this occasion Atlantic City enjoyed the advantage of offering an attractive programme of clinics and lectures provided by the medical colleges of Philadelphia after the adjournment of the meeting.

One factor which may have contributed to diminish the attendance at Atlantic City was the unusually cold weather which prevailed all over the north and west. It was uncomfortably cold during the first two days, the temperature ranging between 52 and 57 Fahr. during the middle of the day, with a chilling wind from the ocean, so that surf bathing was out of the question, while those who essayed promenading or being propelled along the famous "Board-walk", a special feature of the place, had to wear overcoats.

Fortunately, the weather became milder on the evening of Wednesday, the second day, after which there was a general expression of relief.

There were the usual social features, including the overcrowded evening reception in honor of the president, musicales, receptions, and special functions for the visiting ladies, in addition to which there were section banquets and several enjoyable reunions of college alumni in the form of "smokers", but on the whole, the prevailing spirit seemed to be that of attending conscientiously to the business of the meeting. This industrious disposition was greatly favored by the circumstances of the weather being so cold and that the programme included no large excursions. All amusements on the pier were free.

The attendance from Louisiana, while not large, was fairly representative, and our State was honored by having Dr. R. Matas, Professor of Surgery in the Undergraduate Department of Tulane, elected chairman of the Section on Surgery.

The large sections, such as those on General Medicine and Surgery, met in spacious music halls, while the smaller ones occupied hotel parlors and churches. There were nearly three hundred and fifty papers scheduled, besides the set addresses, and as most of those papers were actually read and all the addresses delivered, it is obviously impossible in this brief mention of the proceedings to enter into details. A glance at the list of those named in the "Index to Authors of Papers" shows that nearly all the great writers and teachers of the United States were there, and the titles of their papers cover a formidable range of subjects.

Joint meetings were quite popular, or else the subject of goitre is a live question of the day. The attendance during the symposium on this subject numbered three-fourths of the visiting members. Another question which every surgeon seemed to be seeking light upon was the prevention of abdominal adhesions and post-operative ileus.

The addresses were of a high class, particularly that of President Bryant, who dwelt at length upon higher medical education and the need of greater endowment of schools.

The section whose work has perhaps the least element of "shop" about it and which reaches out widely in its appeal to the general

public is that on Hygiene and Sanitary Science. It has steadily grown in importance and interest until its influence bids fair to dominate the trend of medical thought in this country along its special lines. This session was notable as regards the number and value of papers, some of the best of which were superbly illustrated with lantern slides. Among these may be mentioned two splendid papers, "Modern Methods of Sewage Purification and Relative Applicability," by Geo. C. Whipple, of New York, and "Sewerage Purification by Septic Tanks and Chemical Precipitation," by Geo. T. Moore, of Washington, D. C.

On Thursday Dr. W. Gilman Thompson, of New York, and Dr. Albert J. Ochsner, of Chicago, read their great papers on Hospital Construction, both profusely illustrated with lantern slides. Dr. Thompson's paper was entitled "Modern Hospital Construction", and he showed all that he considered latest and best in the modern hospitals of Europe, expatiating specially on the beauty and merit of the pavilion plan, of which the Johns Hopkins Hospital at Baltimore has been the prototype. To the surprise of many of the large audience he showed a new and superb hospital at Rome, Italy, which seemed to surpass all those in other European cities. These great hospitals have been established at enormous expense and the cost of operating them is correspondingly great, which facts, duly dwelt upon by Dr. Ochsner in following Dr. Thompson, served admirably to introduce the contention made by the latter in his paper, that for purposes of general utility and especially to meet the needs of small cities, it is preferable to build hospitals with a number of stories under one roof, rather than on the showy and costly pavilion plan. Dr. Ochsner said that it is easy in any large city to find some millionaire willing to make amends by giving a million or two for a pavilion hospital to be named after himself, but that in the smaller cities this would simply mean that the people would have to do without hospitals. Without in the least disparaging the pavilion plan he laid great stress on the perfection of the "Lucy Brinkley" hospital recently erected at Memphis, Tenn.. for \$60,000, as illustrating his point of view, and argued that a philanthropist willing to donate a million of dollars for a hospital would do vastly more good by spending, say a hundred thousand on the building and equipment, leaving nine hundred thousand for

endowment, than by lavishing the whole on the buildings, leaving the problem of maintenance for others to solve. This argument met with hearty applause.

There was a part of the programme on the first day in which the subject of specific diseases in relation to depopulation and race deterioration and the inevitable protest against race suicide had an inning, after which the Section settled down to business.

The Scientific and Commercial Exhibits, the latter for the first time fully under control of the Association, were admirable and attracted a great deal of attention.

We must mention the opening of the new and magnificent Jefferson College Hospital in Philadelphia, which occurred with imposing ceremonies on the afternoon of Friday. These ceremonies took place in the old Walnut Street Theater. The orator of the occasion was Prof. Wm. H. Welch, of Johns Hopkins University, who delivered a most scholarly address covering the requirements of modern medical education, and who, at the end of the ceremonies was duly created a Doctor of Laws by the College. Prof. Chalmers Da Costa followed with a witty historical address, after which the audience adjourned to inspect the new hospital, in the sun parlor of which, i. e., on the eighth floor, an elegant luncheon was served.

This new hospital, embodying every known improvement and as near fireproof as is possible, illustrates Dr. Ochsner's view of the advantages of many stories. It is situated in the heart of the city, just as is the N. O. Sanitarium, and seems to promise all that can be hoped for in a hospital planned for work and teaching in connection with a great medical college.

There were given on June 8, 9, 11 and 12 at several hospitals and colleges of Philadelphia a series of clinics especially designed for the benefit of physicians returning from Atlantic City, affording opportunity to those from remote parts of the country to study up-to-date methods and to hear some of the foremost teachers of the day.

The next meeting of the Association will be held under the direction of Dr. H. L. Burrell, of Boston, at Chicago, a city which is convenient of access from all parts of the country, and it is to be hoped that many physicians of Louisiana and other Southern

States who have not realized by attendance the pleasure and profit to be derived from such fraternal gatherings may decide to go. At one of the general meetings of the association a thoughtful lay visitor remarked in the hearing of the writer, "This is undoubtedly the most intellectual body of men in America." If such a sentiment is inspired in the mind of an outsider, how much more should every American physician desire to identify himself with that body and to be present at its deliberations.

THE NEW ORLEANS SANITARIUM TRAINING SCHOOL FOR NURSES held its sixteenth commencement exercises at the New Orleans Sanitarium on Wednesday, May 29, under most successful auspices. Addresses were made by Dr. Chas. Chassaignac, the President of the Sanitarium, and by Miss Mary McGibbon, the superintendent of the school. The following young ladies were graduated from this, the pioneer institution in nurse training in New Orleans: Katherine Eloise Barrere, New Orleans, La.; Margaret Philibena Bott, Baton Rouge, La.; Gertrude Edwina Fortune, Memphis, Tenn.; Verna Glazener, Evergreen, Ala.; Leona Gleason, New Orleans, La.; May Mathilde James, New Orleans; Mary Price Little, Shiloh, Ala.; Ethel Virginia Monroe, Clarksburg, Va.; Fannie Medora Munger, Mobile, Ala.; Ella Jane Stinson, Lindale, Ga.; Bessie Thomas, Jennings, La.

CHANCE FOR YOUNG PHYSICIAN. Bourg, La., wants a physician and recent graduates are not barred. Further information may be had by addressing Mr. F. P. Guidry, Bourg P. O., La.

THE TEXAS STATE MEDICAL ASSOCIATION at its last meeting elected the following officers for the coming year: President, Dr. C. E. Cantrell, Greenville; Vice-Presidents, Dr. H. S. Barnes, Tulia; Dr. D. S. Weir, Beaumont, and Dr. A. B. Small, Waxahachie; Treasurer, Dr. C. A. Smith, Texarkana; Secretary (for three years), Dr. I. C. Chase, Fort Worth.

EXAMINATION FOR ADMISSION IN THE P. H. & M. H. S. The Treasury Department announces an examination of candidates for admission in the Public Health and Marine Hospital Service to be held at the Bureau of Public Health and Marine Hospital Service on Monday, July 15, 1907, at 10 o'clock A. M. Candidates must be between 22 and 30; graduates of a reputable medical college;

must furnish testimonials from responsible persons as to their professional and moral character. The examinations are physical, oral, written and clinical.

Assistant Surgeons receive \$1,600.00; Past Assistant Surgeons, \$2,000.00, and Surgeons, \$2,500.00 a year. Quarters are provided or commutation according to grade is allowed.

Information will be furnished on application to the Surgeon General of the above Department, at Washington.

MESSRS. PARKE DAVIS & Co. announce that Mr. Frank G. Ryan has been advanced to the presidency of this company. His long service in various capacities fit him exceptionally for his new position.

INDIAN SANITARIUM AT FORT SPOKANE. Capt. John McA. Webster, agent for the Spokane and Colville reservations, has received an order, following his recommendations to the Indian Department, to establish a sanitarium in old Fort Spokane, in eastern Washington, with a resident superintendent and physician, and a staff of trained nurses in charge. All Indian children of school age, who have been barred from the boarding and day schools of the reservation on account of diseases, will be admitted. This order for establishing a sanitarium will include not only the Spokane and Colville reservations, but all reservations in eastern Washington and northern Idaho.

Captain Webster says that between 250 and 300 children can be secured from the reservation. The object the Indian Department has in view is the general health of the Indians. The segregating of the children at the sanitarium, under careful treatment and rigid sanitary conditions, will mitigate the ravages of diseases, which are so rapidly decimating the ranks of the descendants of the American aborigines.

Another important object is to protect the white settlers when the reservations are opened for settlement, by isolating the diseased Indians. It is hoped by the management to have everything in readiness for opening the sanitarium by fall.

Dr. A. D. Snyder, who has been the Indian school and reservation physician at Fort Spokane several years, has resigned. His place has been taken by Dr. F. A. Rheling. F. F. Avery has been appointed superintendent of the reservation day schools in con-

nection with his position as head of the Fort Spokane boarding school.

CLINIC FOR MOTHERS. It is believed that Chicago is to be the first city in the United States to have a regularly established system of mothers' clinics for the free instruction of parents in the care of children. Plans have been prepared for a building in which this novel scheme is to be inaugurated, and building operations will soon begin. The plan of establishing such a clinic is a direct outgrowth of a kirmess held last fall by the Children's Memorial Hospital. With the \$25,000 raised by the Cribside Committee, a pavilion is to be erected as a part of the hospital's projected new equipment. In a specially equipped room of this building the first of the clinics will be held.

THE BOARD OF REGENTS in their meeting in Ann Arbor, decreed that, beginning with the class to enter in the fall of 1909, every candidate for the degree of M. D. in the college of medicine and surgery of the University of Michigan shall show a certificate that he has had two years' work in the literary department of some first-class college.

CHINESE LEPERS IN CANADA. The entire leper colony on D'Arcy Island, near Victoria, consisting of eighteen Chinese, has been sent to Canton, China. This comes as a result of an agreement between the Chinese and the Dominion Government. The Dominion held it was unfair for it to treat foreigners for a disease contracted in a foreign country.

NEW DEPARTMENT FOR NURSES. The Medical College of Fort Worth, Texas, has added to its curriculum a department for nurses. A full course comprises three years' instruction.

CAMPAIGN BY LOUISIANA ANTI-TUBERCULOSIS LEAGUE. The campaign started some time ago by the Louisiana Anti-Tuberculosis League for the establishment of a sanitarium in St. Tammany Parish for the treatment of incipient cases of the disease, has reached the point where actual work can be commenced.

MEETING OF THE MISSISSIPPI OPTICAL SOCIETY. The Mississippi Optical Society has just closed a successful meeting at Hattiesburg. They will meet in Jackson, Miss., next year.

THE SECOND ANNIVERSARY OF THE OPENING OF THE WOMAN'S AND CHILDREN'S DISPENSARY was celebrated on June 1. Visitors were invited to inspect the noble work that is being accomplished through this agency.

THERE WERE 257 APPLICANTS FOR MEDICAL LICENSE before the last meeting of the Mississippi Examining Board and only 71 passed. This is less than 30%.

COLLEGE OF PHYSICIANS AND SURGEONS AT MEMPHIS: GRADUATION EXERCISES. The new College of Physicians and Surgeons, at Memphis, Tenn., graduated twenty-two at its first commencement.

NEW CHARITY HOSPITAL. Lake Charles will have a new charity hospital, work on which has begun.

THE DEATH RATE OF CROWLEY, LA., for the past year was only 6 per cent.

PERSONALS. Dr. G. Guiteras, who went to Cairo, Ill., from here several years ago, has been transferred to Mobile, Ala.

The Governor has appointed Dr. J. J. Martin, of Lake Charles, a member of the State Board of Medical Examiners, vice Dr. A. F. Barrow, term expired.

Dr. A. G. Friedrichs and Dr. J. J. Archinard attended the State Dental Society of Texas meeting at San Antonio and read papers.

Dr. M. D. Haspel, House Surgeon for the past two years at the Senses Hospital, has gone to Vienna to study for three months.

Surgeon J. H. White, United States Public Health and Marine Hospital Surgeon, now stationed in New Orleans, read an interesting paper and received careful attention from the members of the American Society of Tropical Diseases at Atlantic City.

Dr. George Lawrason, of Shreveport, was in New Orleans recently. The doctor practiced here a number of years ago.

Dr. Leon Cusachs has been in Virginia for the past two weeks and will remain there for the greater part of the summer.

The New Orleans doctors who were at Atlantic City for the meeting of the American Medical Association were Drs. J. B. Elliott, Jr., W. W. Butterworth, C. Jeff Miller, G. F. Patton, O. L. Pothier, C. H. Irion, J. Smyth and Dr. R. Matas.

MARRIED: Dr. Patrick J. Stricker, of Fort Adams, Miss., to Mrs. Ida Clara Moebius, of Donaldsonville, La. The couple received the good wishes and congratulations of a host of friends.

DIED: The death of Dr. Tobias Nagel, of this city, occurred on June 9.

Louisiana State Medical Society Notes.

IN CHARGE OF PUBLICATION COMMITTEE.

DR. P. L. THIBAUT, Chairman; DRs. HOMER DUPUY and
CARROLL W. ALLEN.

NEXT MEETING: ALEXANDRIA, APRIL 28, 29, 30, 1907.

OFFICERS—Dr. Oscar Dowling, Shreveport, President; Dr. L. Lazaro, Washington, First Vice-President; Dr. M. J. Magruder, New Orleans, Second Vice-President; Dr. R. B. Paine, Mandeville, Third Vice-President; Dr. P. L. Thibaut, New Orleans, Secretary; Dr. Jules Lazard, New Orleans, Treasurer.

COUNCILLORS—Chairman, Dr. E. J. Graner, New Orleans, 2d Cong. District; Secretary, Dr. John L. Scales, Alden Bridge, 4th Cong. District; Dr. P. E. Archinard, New Orleans, 1st Cong. District; Dr. J. Wofford Sanders, New Iberia, 3d Cong. District; Dr. E. Dunbar Newell, St. Joseph, 5th Cong. District; Dr. C. M. Sitman, Greensburg, 6th Cong. District; Dr. R. O. Simmons, Alexandria, 7th Cong. District.

COMMITTEES FOR 1907.

The President has appointed the following Standing Committees for 1907:

PUBLICATION COMMITTEE: Dr. P. L. Thibaut, *ex-officio*, Chairman; Drs. Homer Dupuy and Carroll W. Allen.

COMMITTEE ON SCIENTIFIC WORK: Dr. P. L. Thibaut, *ex-officio*, Chairman; Drs. J. T. Halsey, Frank Watson, E. O. Trahan and C. Jeff. Miller.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION: Dr. Charles Chassignac, Chairman; Drs. J. M. Barrier, Delhi, and J. L. Wilson, Alexandria.

PARISH SOCIETY MEETING.

The St. John-St. Charles Bi-Parish Medical Society met in semi-annual session on June 4. Dr. S. Montegut read a very interesting paper on "Typhoid Fever". Other topics were discussed and cases reported, after which the members enjoyed a banquet at the Merchants' and Planters' Club.

IMPORTANT NOTICE TO PARISH SECRETARIES.

Parish Secretaries are kindly requested to send in the names of new members as soon as they are elected, as the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL is sent free to every member and we have received complaints from several sources about the non-reception of the JOURNAL. When these complaints were investigated, it was found that, in almost every instance, the name of the new member, or his correct address or initials, had not been sent to this office.

Parish Secretaries are also requested to send to the Secretary of the State Society the names of all new officers elected since 1906, so that our records may be kept up to date.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.

The Autotoxicozes, Their Theory, Pathology and Treatment. By HEINRICH STERN, Ph., M. D. G. P. Engelhard and Co., New York.

In this volume of 222 pages, Dr. Stern discusses in a rational manner the theory of autointoxication.

He refutes some of Bouchard's statements, and proves that his conclusions were erroneous, but gives him credit for "procuring citizenship for the autointoxications in the vast field of pathology", thus preparing the soil for further research.

The author asks, and we think rightly, what else is the "autotoxic origin" of disease but unadulterated hypothesis in most instances? And yet, wherever one turns, autointoxication is spoken of as something self-evident, and of every day occurrence. It has become a stock phrase with many.

The author has something to say on the subject of autointoxication and says it well and forcibly. STORCK.

Practical Dietetics with Reference to Diet in Disease. By ALIDA FRANCES PATTEE. R. F. Patie, Publisher, New York.

This attractive little book contains much information not given in the class room. It is accurate and concise. STORCK.

International Clinics, Vol. II., Sixteenth Series. J. B. Lippincott Company, Philadelphia and London, 1906.

This volume is up to the high standard usual to the International Clinic series.

The articles by Dr. W. H. Porter on "The True Significance of Uric Acid" is a distinct contribution to this subject.

The Use of Discarded Street Cars in the Open-Air Treatment of Tuberculosis, by J. J. Walsh, is deserving of some consideration in view of the present interest attaching to this subject.

Hysterical Neuroses of the Stomach with the Report of a Case of Rhythmical Borboryg of Hysterical Origin, by J. H. Lloyd, contains some points of interest. STORCK.

Essentials of Obstetrics. By CHARLES JEWETT, A. M., M. D., Sc. D., assisted by HAROLD F. JEWETT, M. D. Third Edition, Revised and Enlarged. Lea Bros. & Co., New York and Philadelphia, 1907.

This is a convenient little volume of 404 pages intended to place the essential facts and principles of obstetrics within easy grasp of the student, and act as an introduction to the more elaborate treatises. Dr. Jewett also advises it as a guide in following didactic teaching during the college course. The work is essentially practical. Theoretical discussions are intentionally eliminated.

There has been a thorough revision in the present edition. MILLER.

The Eye, Ear, Nose, and Throat. By WOOD, ANDREWS AND HEAD. The Year Book, Publishers, Chicago.

This is the 1906 edition of the Practical Medicine Series devoted to a review of Eye, Ear, Nose and Throat Diseases, and is a news courier, the annual appearance of which is looked forward to with much interest. Comprising as it does a complete review of this branch of medicine and the latest accepted theories and advances in practice, it is a very valuable publication for the busy practitioner who has not the time or opportunity to keep posted up to date on the mass of literature being turned out daily by the prolific medical press. The modest price of the little volume puts it within reach of all.

The Practice of Obstetrics. Designed for the Use of Students and Practitioners of Medicine. By J. CLIFTON EDGAR. Third Revised Edition. P. Blakiston's Son & Co., Philadelphia, 1907.

It is a pleasure to announce the appearance of the third edition of Dr. Edgar's book. Those familiar with the former editions will note that the size of the work has been slightly reduced, although considerable new matter has been added, besides 140 new illustrations. One is immediately struck by the profusion of the illustrations. Dr. Edgar has evidently learned the superior value of illustrations in teaching this branch. Many new subjects have been discussed in this edition, among which are Appendicitis Complicating Pregnancy; Birth Paralysis; Vaginal Incision, and Drainage; and Lactation Atrophy of the Uterus.

Many objects have been almost entirely rewritten, especially Vaginal Cesarean Section; Indications for the Induction of Abortion and Premature Labor; Chorioepithelioma Malignum, and most of the chapters on Obstetric Surgery. The chapters on Puerperal Infection and Gestational Toxemia must also be mentioned among those that have undergone extensive revision.

The author mentions in the preface that the book is the result of experience based upon 20,000 labors. Such vast experience easily places Dr. Edgar in the front rank of obstetricians, and his book may be said to be almost encyclopedic in its scope.

MILLER.

Abdominal Pain. By A. ERNEST MAYLARD, M. B. B. S. (Lond.) P. Blakiston's Son & Co., Philadelphia, 1906.

In this volume an analytical study of abdominal pain is made with special reference to its causes and clinical significance.

Several diagrams and drawings serve well to explain the anatomical distribution of nerves with their most frequent clinical manifestation—pain.

This book, which is the second revised edition, appeals mostly to practitioners of medicine.

LARUE.

Orthopedic Surgery. By ROYAL WHITMAN, M. D. Lea Bros. & Co., Philadelphia and New York, 1907.

This work is certainly deserving of the highest commendation, as it covers the whole field of orthopedics, a knowledge of which is so little diffused among students and general practitioners.

This difficult and somewhat complicated branch of medicine is presented in a clear and intelligent form, aided materially by five hundred and fifty-four engravings.

It is an up to date expose of the subject.

Reference is made to Calot's operation on the forcible correction of the deformity in Pott's disease, a revived Hippocratic measure, but which has once more been discarded.

The hysterical spine, of which the reviewer not long since saw a case and treated as suggested by Whitman.

The Lorenz operation of bloodless reduction is given ample space.

In connection with the method now in vogue of Bier's treatment of tuberculous joints Whitman remarks: "Bier's treatment of tuberculous joint disease was suggested by the observations of Rokitansky, that phthisis was uncommon in individuals suffering from disease of the heart when the mechanical obstruction was sufficient to cause venous congestion of the lungs."

On this assumption is based the application of the rubber band in such a way as to interfere with the return venous flow, but not the arterial supply.

Kirrimisson, the French authority on orthopedics, has rejected this method, at least in the treatment of tuberculous joints.

This popular mode of treatment is well described by Whitman. Add to the foregoing a good type, fine paper, and an elegant and durable binding.

LARUE.

Tropical Medicine, with especial reference to the West Indies, Central America, Hawaii and the Philippines, including a general consideration of Tropical Hygiene. By THOMAS W. JACKSON, M. D. P. Blakiston's Son & Co., Philadelphia, 1907.

It is with keen pleasure that we bring to the notice of our confreres the appearance of the first American Book on Tropical Medicine, the more so that it refers especially to the West Indies, Central America, Hawaii and the Philippines. It is the immediate result of our expansion in those regions that brought about our début in this line of medical work, and there is no boast in presuming that once aroused, our medical interest, we might say, genius, will produce some contributions of real value. We

have already won our "golden spurs" with Reed, Carroll and their associates; others will follow.

The compilation of facts in the book herein presented will certainly serve its main purpose, namely, teaching "our brethren, black, brown, yellow and white how to live, how to maintain health, prosperity and happiness." The view of the author about sprue impressed us as a plausible one. In our experience, so far, it is a fact that the peculiar diarrhea, sore-mouth and abdominal distension of Sprue attributed to a specific infecting micro-organism, have been noted as a result of long standing gastro-intestinal disease in the tropics, analogous to the lesions following repeated infections of hemameba (malaria), which are called chronic malaria, and wrongly so, for this chronic condition is not malaria proper, but a resultant of repeated tropical gastro-intestinal disorders. Of course, our mind is open to conviction at all times; but, for the present, Jackson's view on sprue seems to be correct. We can not but encourage most earnestly all endeavors in tropical work. E. M. D.

Tuberculosis. Knopf's Prize Essay. Published by Fred P. Flore, 514 E. 82d St., New York.

This is a revised edition, with supplement, of the American editions (1901, 1903, 1905) of the work of S. A. Knopf, M. D., New York, to which the "International Congress to Combat Tuberculosis as a Disease of the Masses" convened at Berlin, May 24 to May 27, 1899, awarded the International Prize. The supplement, which is the feature of the present 4th edition, refers to Home Hygiene, School Hygiene, Installation of the Sanatorium, Treatment at Home, and a Historical Review of the Anti-Tuberculosis Movement in the United States. The motto of the work embodies its scope: To combat consumption as a disease of the masses successfully requires the combined action of a wise government, well trained physicians, and an intelligent people. We all who have any progress in that line at heart, after listening to this, sincerely respond a profound "*ainsi soit il*". E. M. D.

Diseases of the Digestive System. Edited by FRANK BILLINGS, M. D. D. Appleton and Company, New York and London, 1906.

This volume is one of a series on Modern Clinical Medicine published by D. Appleton and Company.

The present volume is edited by Dr. Frank Billings, and the translation is done by Dr. Julius L. Salinger, who is well known to the medical profession for his several able translations of foreign books.

The general makeup of the book is commendable, and a glance at the list of contributors will give some idea of the wealth of information contained therein. While we are no slave to authority, it must be conceded by all students of internal medicine that the following contributors, Rosenheim, Flunier, Leo, Strauss, Riegel, Ewald, Boas, Hirschfeld, Oser, Minkowski, Stadelmann, Krauss, Neusser, Varardt, Strasburger, Hoppe-Leyler and Nothnagel, have each earned the right to a high place in the field of diseases of the digestive system.

Advance in the study of the diseases of which this volume treats was made possible by the discoveries of modern chemistry, which were undreamed of a few decades ago. As a consequence of the application of superior chemical knowledge, this branch of internal medicine has been removed from that of mere guess to that of the most exact which engages the attention of the internist.

Not many years ago diseases of the pancreas received little or no mention in medical works; whereas, in the volume under review Dr. L. Oser, of Vienna, contributes an excellent article on the Symptomatology of the Diseases of the Pancreas. It is also gratifying to know that one

of our countrymen, Dr. Opie, has contributed much of value to the study of diseases of this important organ.

The value of the macroscopic, microscopic, bacteriologic and chemical examination of the feces is clearly set forth in the volume before us, while further promise is held out of what may follow.

The general practitioner will find this work of much value in elucidating diseases of the digestive system. At the same time, he will obtain a clear insight into the best thought of the Vienna and the German schools of medicine relating to the subject under consideration.

STORCK.

Publications Received.

LEA BROS. & CO., Philadelphia and New York, 1907.

The Essentials of Histology: Descriptive and Practical, by E. A. Schäfer, LL. D., Sc. D., F. R. S. 7th Edition.

A Treatise on the Principles and Practice of Medicine, by Arthur R. Edwards, A. M., M. D.

YEAR BOOK PUBLISHERS, Chicago, 1907.

Practical Medicine Series. Vol. I. *General Medicine*; Billings-Salisbury. Vol. II. *General Surgery*; Murphy. Vol. III. *Eye, Ear, Nose and Throat*; Wood-Andrews-Head. Under the general editorial charge of Gustavus P. Head, M. D.

P. BLAKISTON'S SON & CO., Philadelphia, 1907.

Cancer of the Rectum, Its Surgical Treatment, by Harrison Cripps, F. R. C. S.

Manual of Operative Surgery, by John F. Binnie, A. M., C. M. 3d Edition.

Infectious and Parasitic Diseases, by Millard Langfeld, A. B., M. B.

Foods and Their Adulteration, by Harvey W. Wiley, M. D., Ph. D.

Human Anatomy. Morris-McMurrich. 4th Edition. In five parts. Part I. *General Morphogeny. Osteology. Articulations*. Part II. *The Musculature. The Organs of Circulation. The lymphatics*.

W. B. SAUNDERS & CO., Philadelphia and London, 1906.

Prevalent Diseases of the Eye, by Samuel Thebald, M. D.

Diagnostics of the Diseases of Children, by Le Grand Kerr, M. D.

Surgical Diagnosis, by Daniel N. Eisendrath, A. B., M. D.

The Technic of Operations Upon the Intestines and Stomach, by Alfred H. Gould, M. D.

A Textbook of Diseases of Women, by J. Clarence Webster, A. B., M. D.

Atlas and Textbook of Human Anatomy, by Johannes Scobotta, M. D. Edited with Additions by J. Playfair McMurrich, A. M., Ph. D. Vol. I. *Bones, Ligaments, Joints and Muscles*. Vol. II. *The Viscera, Including the Heart*.

MISCELLANEOUS.

Report of the Postal Commission (59th Congress, 2d Session) Authorized by Congress to Make Inquiry Regarding Second Class Mail Matter, by the American Weekly Publishers' Association, W. D. Boyce, President, Chicago, Ill., March, 1907.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR MAY, 1907.

<i>CAUSE.</i>	<i>White.</i>	<i>Colored.</i>	<i>To al.</i>
Typhoid Fever.....	15	4	19
Intermittent Fever (Malarial Cachexia)	2	4	6
Smallpox.....	9	3	12
Measles	4	1	5
Scarlet Fever.....	2		2
Whooping Cough.....			
Diphtheria and Croup.....			
Influenza			
Cholera Nostras.....			
Pyemia and Septicemia		1	1
Tuberculosis.....	51	44	95
Cancer.....	8	4	12
Rheumatism and Gout	1		1
Diabetes			
Alcoholism	3	1	4
Encephalitis and Meningitis.....	12	3	15
Locomotor Ataxia.....	1		1
Congestion, Hemorrhage and Softening of Brain.....	18	9	27
Paralysis	3		3
Convulsions of Infants	3	1	4
Other Diseases of Infancy	21	14	35
Tetanus.....		3	3
Other Nervous Diseases	4		4
Heart Diseases.....	34	26	60
Bronchitis	3	9	12
Pneumonia and Broncho-Pneumonia.....	28	31	59
Other Respiratory Diseases.....	2	2	4
Ulcer of Stomach.....			
Other Diseases of the Stomach	2	3	5
Diarrhea, Dysentery and Enteritis.....	55	35	90
Hernia, Intestinal Obstruction.....	1	3	4
Cirrhosis of Liver.....	7	2	9
Other Diseases of the Liver	6	2	8
Simple Peritonitis	1	1	2
Appendicitis.....	3		3
Bright's Disease	14	20	34
Other Genito-Urinary Diseases.....	4	8	12
Puerperal Diseases	1	3	4
Senile Debility.....	13	5	18
Suicide	2	1	3
Injuries.....	18	9	27
All Other Causes.....	20	9	29
TOTAL.....	371	261	632

Still-born Children—White, 18; colored, 16; total, 34.

Population of City (estimated)—White, 251,000; colored, 90,000; total, 341,000.

Death Rate per 1000 per annum for Month—White, 17.74; colored, 34.80; total, 22.24.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure29.95

Mean temperature74.

Total precipitation14.74 inches.

Prevailing direction of wind, southeast.

*Paullum sepultæ dislat in herba
Celata virtus. — HORACE.*

New Orleans Medical and Surgical

Journal

ESTABLISHED IN 1844.

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THE CATHARTIC AND DIURETIC
ACTION OF COLCHICINE.
THE DIAPHORETIC ACTION OF
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THE ANTI-RHEUMATIC AND
ANTISEPTIC ACTION OF SALICYLIC ACID**

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TABLETS
TONGALINE & QUININE
TABLETS**

(WRITE FOR SAMPLES)

MELLIER DRUG COMPANY, ST. LOUIS.

AUGUST, 1907.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

(Established in 1844.)

Official organ of the Louisiana State Medical Society
and of the
Orleans Parish Medical Society

EDITORS:

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

H. C. SMITH, Business Manager.

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Original Article.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a WRITTEN order for the same accompany the paper.)

Ergot and Quinin as Oxytocics.

By DR. L. M. GRIFFIN, Oakley, La.

Our Society having selected the subject "Ergot and Quinin as Oxytocics" at our last meeting, and having agreed to read a paper thereon, at this meeting, I will state in the beginning that I shall devote most of my space to the therapeutic action of quinin as a uterine stimulant.

I admit in the beginning that my views are in conflict with the teachings of some of our leading text-books, but experience has taught me that we, as practitioners, should have thoughts and ideas of our own, and not rely on the printed opinions of others to the exclusion of our own independence of thought and action.

One of my brother practitioners at the last meeting corrected me as to the meaning of the word "oxytocic," claiming that a medicine was not of that class when it stimulated normal labor.

Dunghlison defines the word oxytocic as "a medicine which hastens delivery." He does not claim that it must be premature, or at the normal period, therefore anything which causes the gravid uterus to expel its contents comes under this classification.

In 1879 I had a case of a colored woman, multipara, aged 30, in the seventh month of pregnancy, who was having chills and fevers every day, with increasing severity. I temporized for several days, but seeing that unless I stopped that periodicity she would die, I gave, during the night, four doses of 8 grains each of sulphate of quinin. The result was premature delivery before sunrise.

In 1880, in a case of a white primipara threatened with premature delivery at the 6th month, I administered morphin and other sedatives without controlling the contractions, till on the second day the membranes broke and the amniotic fluid was discharged. Then, thinking that miscarriage was inevitable, I gave fl. ex. ergot $\frac{1}{2}$ drachm every hour till four or five doses had been taken. The contraction ceased entirely and the patient went to full term and was delivered of a healthy child after a labor of 12 hours, with no flow of liquor amnii.

In October, 1882, the same lady was in the 8th month of pregnancy, when attacked by a severe case of chills and fevers. I deferred the administration of quinin till I considered her life in danger; then I began quinin in 5 grain doses, every three hours, and before the fourth dose was due she was in labor, and delivered a healthy, although premature boy.

I have only cited these two cases, but in my practice of more than a quarter of a century I have frequently observed the stimulant effect of quinin on the uterine muscular fibers.

In labor at full term I have given ergot repeatedly without any response, and after waiting hours without any response I have found that the first full dose of quinin would have a marked effect. I have, and will always have, a preference for quinin in cases of tedious labor. These cases, as you gentlemen know, are exhausting to the patient and very tiresome to the physician, especially when he is miles from home and the accommodations for a guest anything but inviting for a stay-over during the night.

Since our last meeting I attended a white lady in her fourth con-

finement. I arrived at 1:30 a. m., found dilatation all right, pains weak and ineffectual. Gave ergot in half drachm doses till 6 a. m. I then went home, got breakfast and had my horse fed, returned at 9 a. m., finding her condition unchanged. I gave 6 grains of quinin at 9, repeated this at 10 a. m., and delivery occurred at 10:45 a. m.

The three cases mentioned are only a few out of many cases.

As to ergot, it is an ideal hemostatic, but as a uterine stimulant it does not approach quinin.

Thanking you, gentlemen, for your kind attention, I will leave the subject open for your discussion.

Clinical Lecture.

Rosacea of the Chin and Nose.

By JOHN V. SHOEMAKER, M. D., LL. D.

Professor of Materia Medica, Therapeutics, Clinical Medicine and Diseases of the Skin in the Medico-Chirurgical College and Hospital, Philadelphia, Pa.

GENTLEMEN: Here is a patient with typical rosacea, which is a chronic inflammatory disease of the face, characterized by vivid redness, due to enlargement of the capillary bloodvessels, and later by hypertrophy of the sub-cutaneous cellular tissue. The patient is 34 years old, nativity United States, occupation housewife. Her history is entirely negative as regards heredity and infection. Hence we can at once consider it a constitutional disease. The disease is always confined to a portion of the face and is more common on the chin in women than in men.

Five years ago the disease began as an intense redness of the chin and in the course of four months the left ala of the nose was likewise involved. On pressure the redness disappeared and when exposed to the cold assumed a livid tint. She states that the past year she notices a sensation of warmth in the parts after taking a full meal.

The skin over the affected areas is thick and purplish between the red papules. On more close examination the bloodvessel of the

skin in the involved portion are distended, the surface of the skin appears greasy and feels cold to the touch.

Diagnosis. Rosacea can be diagnosed by its history, course and character of the affected portions of the skin. The diseases of the skin that resemble it most are acne, syphilis, erythematous lupus, and frostbite. These tables will clearly and briefly distinguish these diseases from rosacea:

Rosacea.

- (1) Affected skin more vascular.
- (2) The skin hypertrophied.
- (3) Involves both the blood vessels and sebaceous glands.
- (4) Confined to the face.

Rosacea.

- (1) No history.
- (2) Not preceded by malaise and sore throat.
- (3) Tubercles and pustules involve the sebaceous glands.
- (4) Color of tubercles is red, or purplish, and confined to the face.
- (5) No crusts or ulcers.

Rosacea.

- (1) No scales.
- (2) Color dull or purple.
- (3) No tenderness on pressure.
- (4) Papules solid.
- (5) No cicatrices.

Rosacea.

- (1) Parts red or purplish and no swelling.
- (2) Skin appears greasy and not influenced.

Acne.

- (1) Affected skin more erythematous.
- (2) Skin not so much hypertrophied.
- (3) Involves the sebaceous glands only.
- (4) Rarely confined to the face.

Syphilis.

- (1) History of infection.
- (2) Preceded by malaise, sore throat and the rosaceous rash.
- (3) Cutaneous glands not involved.
- (4) Color of tubercles coppery color and rarely confined to the face.
- (5) Crusts and ulcers may be present.

Erythematous Lupus.

- (1) Yellowish scales.
- (2) Color erythematous, and bright red.
- (3) Tenderness on pressure.
- (4) Papules gelatinous.
- (5) Cicatrices present.

Frost Bites.

- (1) Parts bluish-red and much swollen.
- (2) Skin looks inflamed and is painful.

Pathology. In the first stage of rosacea the minute blood-vessels are congested, while in the second stage they become hypertrophied and permanently dilated. An infiltration of lymphoid cells takes place into the tissue surrounding the vessels, and the connective tissue corpuscles proliferate.

In the third stage there is hypertrophy of the cutaneous glands.

and tissues of the part and the growth of a new connective tissue element. The horny layer of the epidermis is almost destroyed, while the mucous layer is very thick. The papillæ are enlarged, and the blood-vessels markedly dilated and varicosed.

Etiology. Rosacea is more common in men than in women, and mostly in middle age. However, it may occur in youth, especially so in women at the age of puberty, during uterine and ovarian disorders, and during menopause. In women it seldom passes beyond the first and rarely beyond the second stage; but in men in whom the disease affects the nose, more frequently, the third stage occurs more often and seldom before the fortieth year. Heredity has its influence in the production of this disease, and predisposition exists in gouty and rheumatic subjects.

The cause of the disease in this patient is undoubtedly due to her uterine disorder. Our gynecologist thinks she is suffering from endometritis and a cystic ovary. She had also marked dyspepsia, which is another contributing cause, as well as the condition of her liver, which is evidently very sluggish, there being marked jaundice of the conjunctiva and bronzing of the skin. Among others of the prominent causes are chlorosis, anemia, alcoholic excesses, want of cleanliness and in those whose faces are exposed to great heat, as bakers and engineers, etc.

Treatment—The method of treatment to be employed in this case, as well as in other cases, should largely depend upon the stage and cause of the affection. We will endeavor to correct her nutritive forces and digestive apparatus by proper diet and medication. Her diet must be plain and the food well prepared, so that it may be easily digested and assimilated. We will request her to abstain from the use of too much sugar, starchy and fatty foods. It is always better to tell the patient exactly what you wish them to eat. Hence, we will give her a diet list on which we will allow her to eat soft boiled or poached eggs, lamb chops, broiled beef steak, roast lamb and beef, baked or boiled potatoes, spinach, asparagus, stewed onions, junket, toast or zweiback bread, no coffee or tea, but plenty of milk. In the morning before breakfast she should drink at least a cup of hot water to make her glands more active. Immediately she must first have a calomel purge, followed

by a saline. Then the following combination in the form of a pill will be of great value:

R Argenti nitratis.

Extracti hyoscyami...aa gr. $\frac{1}{4}$.

M. et ft. pil No. i.

M. No. xx. Sig. One pill an hour after each meal.

Of course we will make the necessary changes in her medicine as she progresses in the recovery of her dyspepsia.

She must also be treated for her uterine trouble by the gynecologist.

Galvanism is of great value in this class of patients applied to the affected parts to equalize the circulation and tone up the relaxed blood-vessels in the parts. She will receive from five to twenty milliamperes applied for ten minutes daily.

Local applications of ointments sometimes act very synergistically. They keep the skin soft and pliable and protect the parts from the irritation of the cold winds. The ointment I will suggest for the patient consists of

R Olei eucalypti.

Creosoti beechwood....aa....m. v.

Chloral hydrati.

Camphoræ....aa....gr. v.

Unguenti zinci oxidi.

Ungenti aquæ rosæ....aa.... $\frac{3}{4}$ ss.

M. ft. ung. Sig.: Apply locally twice daily.

Clinical Report.

Epilepsy from Hydrocephalus after Complete Ossification of Cranial Bones—Cured by Trephining Operation.

By E. M. ROBINSON, M. D.,

Gynecologist to St. Vincent's Hospital, Birmingham, Ala.

Family history good, though mother is very nervous. No history of convulsions or insanity in the family. I saw the patient

first in July, 1901. She was then 5 years old. She began at the age of 4 to have fainting spells which came regularly once a month. She would have only one spell and it would last from one to five minutes. These soon began to increase until when she came under my observation she was having them every week, and she would remain stupid for an hour or more and at this time they became violent convulsions which increased in frequency and severity until in a few months she was having several every day. At about this time there began on the right side a paralysis; she was unable to use the right side at all, and was unable to speak. March, 1903, she was removed from the city until January, 1904. She was then having from 30 to 40 convulsions in 24 hours, and was very much emaciated.

Some physicians had suggested an operation to the parents; there seemed so little to be lost that I advised it, but told her parents it was a very forlorn hope. I operated January 14, 1904. A piece of bone $\frac{3}{4}$ of an inch in diameter was removed by trephin and rongeur forceps from the left side over the space known as Broca's region; this was chosen on account of the aphasia that was present. When the bone was removed the membrane bulged through the opening like a distended balloon. I punctured the arachnoid membrane and a quantity of fluid escaped and continued to escape. Inspection of the brain and membrane showed nothing abnormal except this clear watery looking fluid. I inserted a drain through the opening in the membrane, my object being to allow the escape of this fluid now present and to form, if possible, a fistula through which it could escape as it formed. In my attempt to do this an inflammation occurred; she had meningitis and came near dying. I was unable to keep the fistula open.

Within the first week following the operation the number of convulsions had reduced to one-fourth, and gradually became less and less frequent until six months after the operation she was having only one or two during the day, and two or three during the night (she always had them more frequently at night than during the daytime).

In less than one year's time they had stopped altogether, and she has had none since. It has been three years since the operation,

and more than two years since she had the last convulsion. The paralysis began to improve immediately after the operation; she learned to walk and her speech gradually returned; her general health has been almost perfect and she has been in school two years, and has no trouble keeping up with the children in her grade.

In my opinion the epilepsy in this case was produced by pressure from the fluid which began to form after complete ossification of the cranial bones and closure of the fontanelles. The cure was the result of the meningitis and is accounted for in the same way as a hydrocele is cured by packing with gauze.

If there had been present symptoms of tuberculosis we would have presumed that the hydrocephalus was due to this condition, and the favorable result following the operation was to be accounted for as in the permanent cure of a miliary tubercular peritonitis with ascites by opening the abdominal cavity and draining.

Hydrocephalus had never been suspected by me or any one else until the operation revealed the excess of fluid present. There had been no bulging at the sutures or enlargement of the head. The pressure was removed as soon as the fluid stopped forming, but the habit had formed and almost a year passed before she was entirely free from the convulsions.

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P. L. Thibaut, M. D., Chairman.

TWENTY-EIGHTH ANNUAL SESSION, MAY 14-16, 1907.

Treatment of Chronic Heart Disease.

By J. B. ELLIOTT, JR., M. D., New Orleans, La.

In opening a discussion on "The Diseases of the Heart," one feels much like the physician who is called to see a patient suffering from this very trouble. What can be said or done with a valve

broken or an artery diseased? If we will but take an interest in, and not be bored by these constantly complaining patients, we will find that much can be done, not only to make their lives more bearable, but that a fairly active life can be promised, even in the face of what seemed at first incurable and hopeless organic lesions.

Much has been done in the last decade by Mackenzie, Gaskell, Engelman, His, Jr., Erlanger and others to throw new light on the physiology of the heart, thereby giving the clinician a truer conception as to what must be done to overcome the ravages of a diseased endo-or myocardium. Especially interesting has been the work of Erlanger and his associates in the establishing of the positive causes for the Stokes-Adams syndrome or heart block. By using, in the dog, clamps which grasped firmly the auriculo-ventricular septum and thereby causing pressure on the bundle of His, he was enabled, by gradually tightening the clamps to retard and finally completely block ventricular contraction, while not interfering with the regular contractions of the auricles. This experiment goes far to prove the myogenic theory of heart contraction.

In the diagnosis of heart condition, I think we should always hark back to that old adage, namely: "With apex in normal position and precordial area not enlarged, we can safely disregard any murmurs heard." So often do we see applicants for insurance rejected on account of a cardiac murmur, which on closer examination proves to be purely cardio-respiratory. Another important point in a thorough examination is the necessity of outlining carefully the right border of the heart and aorta. The slight dullness in the 2nd and 3rd right intercostal spaces may be the only objective signs of a beginning dilatation of the aorta or a true aneurism. Referred pain in the upper left interscapular region should always make us fear some thoracic aneurism. Only lately have I seen two patients complaining of dyspnea and intense pain between the scapulæ and in both a positive diagnosis of thoracic aneurism was made, though anteriorly little abnormal could be found.

In coming to treatment, I shall limit myself to the chronic valvular diseases of the heart in the following four grand divisions:

1. Chronic Valvular Disease + Arterio-sclerosis + good compensation.

2. Chronic Valvular Disease + Arterio-sclerosis + broken compensation.

3. Chronic Valvular Disease + Normal Arteries + good compensation.

4. Chronic Valvular Disease + Normal Arteries + broken compensation.

To discuss these seriatim:

(1) Chronic Valvular Disease + Arterio-sclerosis + good compensation. Here we must insist on two points only.

(a) Diet. (2) Quiet life; no medication is required except for mild anginal attacks, which may occur on exertion, and then nitroglycerin, 1/100 grain, twice daily will give relief. If the tendency to dyspnea is rather frequent, nitrite of soda in two grain doses, three times a day, over long periods, is indicated.

Iodid of soda or potassium in 15 grain doses, thrice daily, may help to reduce the tension in the arteries which is generally present. These patients must have at least two evacuations of the bowels daily, and by watching this one point you will save your patient many days and hours of discomfort.

I wish to emphasize this point strongly because I see many cases of this type suffering with asthmatic attacks and dyspnea on whom digitalis, strophanthus, nitroglycerin, all fail to give relief, and even aggravate the condition, when two or three days of what might seem free purgation will cause a cessation of all bad symptoms. The diet should be good proteid food if the patient is of slight build; if the patient is over fat, Oertel's diet will give good results. Alcohol, tea, coffee must be forbidden. These patients must be made to realize the dangers of over-exertion; they will forget themselves, try to run for a car or vault a horse or lend a helping hand on some heavy lift and then find themselves with an acute attack of angina or dyspnea and edema of the lung.

The patients of this class are especially liable to develop bronchitis or bronchial asthma which become contributory causes to the inevitable death of the patient.

(2) Chronic Valvular Disease + Arterio-sclerosis + broken compensation.

Here we have our main props, the ventricular muscles, removed;

can they be replaced in the face of broken valves and non-elastic arteries?

Absolute rest is of course the first order; in bed with back rest, bed pan and urinal, not one ounce of energy can be allowed to escape through voluntary muscular effort. Next purgation, free, constant, so that the venous pulmonary stasis may have some back door through which to escape and not paralyze in diastole the cavities of the right heart. Here nitroglycerin, while acting magically in some cases may cause too great dilatation of the arterioles and an acute attack of edema of the lungs, so should not be tried until the combination of free purgation, plus digitalis and caffein has failed to free your patient of his dyspnea. The combination of the nitrites and digitalis in these cases will give relief temporarily, but we must bear constantly in mind that nitroglycerin is *not* a heart stimulant, and therefore does not help one iota to bring back tone to the relaxed heart muscle. We must have highly concentrated nitrogenous food in small quantities, frequently repeated, to accomplish any permanent good; rare beefsteak, cream, eggs, bone marrow must supply the needed pabulum to the starved heart muscle. We should not be afraid to use morphin and atropin in small doses in these cases; the former gives sleep and is a direct cardiac stimulant, the latter stimulates respiration and prevents threatened edema of the lungs.

(3) Chronic Valvular Disease + Normal Artery + good compensation.

In this condition, both ventricles have hypertrophied enough to overcome the leak or obstruction, as the case may be, and so heart stimulants are not required, in fact these patients are more apt to complain, if young, of fulness in the head and palpitation on stooping than of any dyspnea.

Overeating, alcohol and intercurrent lung disease are the points to be watched in this condition. The first two, overeating and alcohol, put extra work on the arteries, causing premature arteriosclerosis, and secondarily, failure of the good compensation.

Any attack of even mild bronchitis should be promptly treated so as to prevent any extra work on the right heart. All violent athletics should be avoided, but I can see no objection to cycling, golf or horse-back riding; the outdoor life is conducive to greater

oxygenation of the blood, and so freer circulation through the lung.

(4) Chronic Valvular Disease + Normal Artery + broken compensation.

The internist here has a chance to accomplish results that equal, if not surpass, those of his more fortunate surgical brother, and I may say here, parenthetically, that this is almost the only organ which we poor medical men have left upon which to show our powers.

Given a patient with dyspnea, edema and even general anasarca, cyanosis, enlarged liver, albuminuria and in two weeks see this same patient walking about the wards in comfort, makes the physician feel as if he did have some sphere of usefulness other than advising the patient to call in a surgeon. The treatment here again will be first and foremost rest, absolute, with bed pan and urinal, next purgation, and only lastly digitalis in medium dosage. With these must be considered the important point of diet, a point frequently overlooked in the hurry to rush in all the cardiac stimulants, these patients complain more frequently of gastric distress than of any cardiac troubles. Few of our text books lay enough stress on this very practical and important point. The least amount of fermentation or dyspepsia will give bad days and torturing nights. Hard and fast rules cannot be laid down as to just the exact amount or kind of food to be used, but I have generally found that rare beef-steak in small quantities, cold chicken, almost raw eggs, baked apples, toast, buttermilk or vichy and milk give a varied enough diet. Liquids should be kept to a minimum, and never during meals. Vegetables have little caloric value and take up too much space and time.

Having overcome your lost compensation partly by purgation, rest and digitalis, then you can increase your digitalis and add caffeine or strychnin and allow your patient more latitude, warning them frankly and fully of the dangers of constipation, over-exertion or exposure.

It is in this cardiac class that the Nauheim baths, combined with the Schott exercises, give brilliant results. Through the enterprise of one of our leading drug houses, we are enabled now to give these baths in any private house in which a porcelain-lined

bath tub is available. In the over-fat cardiac patient, especially does this therapeutic measure give good results. I would advise those wishing an extensive and enthusiastic review of the possibilities of this method of combined Nauheim and Schott methods to read the little volume of W. Bezly Thorne on the "Treatment of Chronic Diseases of the Heart."

DISCUSSION.

DR. DUPAQUIER said that Dr. Elliott's views were up to the minute. The condition of the myocardium is all important, since, after all, in all cases, treatment centers on myocardial sufficiency or insufficiency.

In the condition: valvular disease plus arterio-sclerosis plus compensation, Dr. Dupaquier concurs with the view of strongly condemning the use of digitalis. The true, the unique indication for digitalis is, of course, decompensation.

Regarding the use of nitroglycerin to meet the arterio-sclerotic condition, Dr. Dupaquier concurs with the view that nitroglycerin is not a so-called cardiac tonic or stimulant. It is a vasodilator, as everybody knows, and while logically its effects should be favorable in relaxing the vessels, yet it must be borne in mind that an increased blood pressure in this case is a necessary evil; in other words, nitroglycerin should be used most carefully.

Regarding angina pectoris, there are cases of true angina which differ from the classical type, the emergency case, calling promptly for amyl nitrite, morphin and alcohol. Dr. Dupaquier knows of one case in which the cardiac neuralgia persists beyond the short duration of the sudden classical attack. In this case he could not use morphin continuously. Good results were had with antipyrin and the ice bag.

Regarding the condition: valvular disease plus arterio-sclerosis plus decompensation, in which we can not do much save to relieve dropsy. In addition to the treatment mentioned in the paper, namely, purging, dieting (dechlorination) and at times bleeding, Dr. Dupaquier uses a diuretic, not injudiciously exhausting the renal epithelium, but carefully; and, none is more serviceable than theocin. Theocin (or theophyllin) is wonderful when

properly given, viz.: not in capsules or powders, but in warm water, watching the ill effects; headache, chiefly, is a forerunner of epileptic seizures.

The dose should be one gram given on alternate days with diuretin.

DR. ELLIOTT, in closing, emphasized the point that the patient should be purged thoroughly before the theocin was given, and better results were then obtained. When the pressure ran high, he was afraid of rupture; the patient in such cases suffered intense pain, had dyspnea, and must be relieved. Sometimes these patients would live on for many years under careful treatment. The patients were not cured, but were relieved by the proper measures. Nitrite of sodium had been found valuable in keeping off the attacks, but he depended on absolute rest, and declared that to be ahead of all medicine and food. He had had the patients put to bed, starved them, purged them, and found the heart getting smaller day by day, without any medication at all.

The Diagnosis of Cardiac Disease.

By DRS. THOMAS RAGAN and S. L. WHITE, Ruston, La.

The heart is an organ whose anatomical relations and physiological functions are so well worked out that nothing new of consequence has been recently added to our knowledge.

It is a muscular pump under nervous control, and normally complies with the demands of the system for an efficient circulation under varying circumstances of activity or repose. It is disturbance of function, rather than pain, that leads the patient to seek treatment. Certain of these disturbances, such as palpitation, arrhythmia, or bradycardia, may be intermittent in character and are not attended with definite signs of organic disease.

It is the purpose of this paper to give a practical scheme for determining the position, size, muscular quality and valvular efficiency of the heart.

After recording a history of the case, the physical examination is taken up. The chest is bared for inspection, the impulse noted and if it can be made out, the apex marked with a dermatographic

pencil. The anatomical position and size of the organ are now made out by percussion. The writers use the finger as a pleximeter and the fingers of the other hand as a hammer. Auscultatory and palpatory percussion are used in certain cases as a check on this method.

The heart is outlined by forcible percussion on the sternum above the base. Rise in pitch corresponds to the upper limit. The upper limit of liver dulness is now found by forcible percussion from above downward, just within the nipple line. The right border is now made out by percussing toward the sternum. Two or three points are established on the left border, as the third and fourth interspaces. Each point on being established is at once marked with a dermatographic pencil. The lower border cannot be made out by percussion on account of the proximity of the left lobe of the liver. The lower end of the line marking the right heart is connected with the apex, by a slightly curved line with its convexity downward.

A normal heart in a normal chest would be found about as follows:

Base, opposite third costo-sternal cartilage; right ventricle, $\frac{3}{4}$ inch to right of sternum; apex, in fifth interspace, one inch within nipple line; lower right border, from 4th right chondro-sternal interspace to apex. This method carefully followed will give results invaluable in the interpretation of the phenomena of the cardiac cycle.

There are many conditions, such as pericarditis with effusion, pleurisy, pneumonia, kyphosis, mediastinal tumors, which displace the heart, or replace the resonance of normal lung.

A normal heart has an auricular contraction, ventricular contraction and repose, in regular order, with corresponding sounds and pauses. These regularly repeated constitute the rythm. In an adult this is about 75 times per minute. The auricles and ventricles should each contract synchronously.

The area being made out, the further examination is to discover and interpret adventitious sounds. The points of most importance are: The place in the cycle in which the sound occurs; its point of maximum intensity; area over which it can be heard; the effect of exertion, respiration, or position upon it. Further points to

note are: intensity, quality, length, and relation to normal heart sounds.

All abnormal sounds produced within the heart are called murmurs. It must be established that the sound taken for the first, or the murmur that replaces it, is systolic. This sound must correspond with the apex beat or with the pulse in the carotid. It is not safe to use the radial pulse for this, as its impulse is sufficiently delayed to be confusing with a rapid heart. All valve lesions lead to dilation and later to compensatory hypertrophy, so the site of the impulse, its force, quality, and intensity of murmur, quality of pulse, and especially the effect of exertion, should be noted on the heart action.

Three stages in the progress of valvular heart disease are to be considered. These are: **Before compensation, this state established, and failing or broken compensation.**

The presence of a murmur that is clearly organic, in a heart that is not enlarged, and that greatly increases its action on moderate exertion, is in the period before establishment of compensation. The murmur alone is not sufficient basis for a diagnosis of valvular insufficiency, but in this particular condition is sometimes the first evidence.

The same murmur in a heart dilated and hypertrophied, and that carries on an efficient circulation, is compensated. In the progress of most cases there comes a time when the heart is unable to maintain an efficient circulation. This is broken compensation if it has succeeded to compensated valve lesions. Cardiac weakness of myocardial origin is not called broken compensation.

The murmurs made at the different valves will now be considered:

MITRAL INSUFFICIENCY: A murmur systolic in time, heard loudest at the apex, transmitted to the axilla and heard in the back, inside of or below the scapula, is mitral insufficiency or regurgitation. This is the most common valve lesion and is best compensated. It is most frequently caused by thickening or curling up of the mitral valve, from rheumatism or chorea in the young. Mitral insufficiency is compensated through dilatation and hypertrophy of the left ventricle, and later, the right heart. This is shown in the size of the heart to the right of the sternum, and ac-

centuation of the pulmonic second sound. The murmur may be loud, blowing or musical. A loud murmur means always a good deal of cardiac force and is of favorable omen rather than otherwise. This murmur is to be differentiated from:

1. Tricuspid Regurgitation.
2. Functional Murmurs.
3. Aortic Systolic Murmurs.

These are all systolic murmurs, but have different areas of greatest intensity and transmission. Tricuspid regurgitation is rarely heard in presence of mitral systolic murmur. The tricuspid murmur is generally of low pitch, and is not transmitted beyond a triangular area that can be marked off on the lower surface of the precordium. Regurgitation at this valve would give pulsation in the great vessels of the neck, also liver.

Functional murmurs are generally loudest at the pulmonic area, but may be heard in any situation. They vary greatly with position, being loudest in the recumbent, and may almost or quite disappear in the erect posture. They are not attended with accentuation of pulmonic second sound, nor with evidence of valvular inefficiency. They are often heard near the apex, just within or without, and beyond the cardiac area.

Roughening or narrowing of the aortic valves may produce a murmur that is heard distinctly at the apex and of a different quality from that heard at the second right interspace. The aortic murmur is not transmitted, however, as is a mitral. Neither is there accentuation of the pulmonic second sound.

MITRAL STENOSIS: This term is applied to narrowing or constriction of the opening between the left auricle and ventricle, obstructing the free flow of blood from the former into the latter. The left auricle dilates and hypertrophies, and compensation is attained by corresponding hypertrophy of the right heart. The left ventricle can take no part in compensation so long as actual stenosis exists. This chamber receives less blood than normal, is not dilated, neither is its wall hypertrophied. No cardiac lesion gives more characteristic signs when they are present. In the Massachusetts General Hospital (Cabot) this lesion is overlooked oftener than any other except tricuspid insufficiency. The signs are present at one time and entirely wanting at another. When they have been pres-

ent and have disappeared, rest in bed, or the influence of digitalis will often cause them to reappear. The typical signs are:

A rough, high pitched murmur at the apex, presystolic in time, accompanied with a thrill. This murmur may occupy any part or all of the diastolic period. It is certainly an auricular systolic murmur, but is generally heard before the beginning of auricular systole, so is called pre-systolic. It terminates with a shock which marks the beginning of ventricular systole. This shock can be felt as well as heard. The thrill is felt in the same area as the murmur is heard. This lesion occurs most frequently in girls after rheumatism and chorea. They then do not develop well, are often victims of tuberculosis; they are pale, small of stature, have the fingers clubbed, and show general evidence of malnutrition.

AORTIC INSUFFICIENCY: Mitral lesions are oftenest seen in the young and are caused by rheumatism and the acute infectious diseases. Aortic lesions are of middle and advanced life. These are from hard work, dissipation, and, especially, syphilis. The murmur of this lesion is heard at the second right interspace and is transmitted down the sternum and is heard at the apex. This is diastolic in time and takes the place of, or is synchronous with, the second sound. The second sound may be heard over the pulmonary area. This lesion is compensated by dilatation and hypertrophy of the left ventricle. The heart is larger in this than in any other lesion. The apex may be in the eighth interspace in the mid-axillary line. The pulse is large and full, but the tension falls at once. This is the Corrigan pulse. This lesion, well developed, will give: Cardiac hypertrophy downward and to the left, diastolic murmur at second interspace or opposite third over mid-sternum, transmitted down the sternum, Corrigan pulse, capillary pulse, Duroziez' double murmur over the femoral and other arteries.

AORTIC STENOSIS: This lesion is in direct contrast with mitral stenosis from a diagnostic standpoint. Mitral stenosis is often overlooked when present; aortic stenosis is made out when only roughening of valve segments, or of the intima, or hemic states, may cause a murmur with the quality of aortic stenosis. The diagnosis of aortic stenosis requires:

1. A systolic murmur in the second right interspace and transmitted to the neck.

2. The characteristic pulse.
3. A thrill.
4. Absence of aortic second sound.

If compensation is good the murmur is apt to be loud, rough, vibrating, or even musical, and widely transmitted in the direction of the blood current. The pulse is slow, small, a gradual rise of the pulse wave, and a corresponding fall. The large volume of blood in the left ventricle forcibly expelled through a contracted orifice, accounts for this quality of pulse. A thrill corresponding to the murmur, in most cases can be made out. The aortic second sound is commonly absent, but the second sound can be heard in the pulmonary area. The presence of the systolic murmur alone does not constitute proof of stenosis. This murmur, often accompanied with thrill, may be caused by (a) roughening of the valves, (2) roughening and dilatation of the arch of the aorta, (c) aneurism of the aorta or of the innominate, (d) functional murmurs, (e) open ductus arteriosus, (f) mitral regurgitation.

These carefully studied and excluded will give a reasonable certainty of aortic stenosis.

TRICUSPID LESIONS: Endocarditis affecting this valve is exceedingly rare after birth. Tricuspid stenosis is one of the rarest of cardiac lesions and will not be considered in this paper. Congenital lesions of all kinds have characters that lead to a diagnosis with the usual methods of examination.

The tricuspid valve is not "competent" in the sense of the mitral or aortic. These latter will stand a good water pressure without leaking; not so the tricuspid. This is normal and doubtless conservative. It easily permits great variations in the amount of blood handled by the heart as sudden muscular strain may necessitate.

The murmur of tricuspid regurgitation is systolic, soft, blowing, and is heard over the lower end of the sternum and ensiform cartilage. It is attended with venous pulse and pulsation of liver. It is relative insufficiency, that is, dilatation from other valve lesions. This condition being caused by mitral or aortic insufficiency, and being a part of broken compensation, is attended with cyanosis, dyspnea, and pulmonary edema. This murmur is systolic, and

in presence of mitral systolic murmur may not be audible. The bell of the stethoscope, however, moved from the apex to the end of the sternum, may find the mitral murmur gradually grow fainter and a murmur of another quality—lower pitch, correspond to the tricuspid area. Percussion gives in this condition a wide area of dulness, to the left as well as to the right of the sternum.

LESIONS OF THE PULMONARY VALVES: *Pulmonary Regurgitation.* This lesion bears the same relation to the pulmonic that aortic insufficiency does to the systemic circulation. The murmur is heard over the pulmonary area, is not transmitted to the apex, is not associated with Corrigan pulse or capillary pulsation. It is recognized by its negative qualities as contrasted with aortic insufficiency.

Pulmonary Stenosis. This is a rare congenital lesion, and is a clinical curiosity in the adult. It has signs by which it can be recognized when it is present.

COMBINED HEART LESIONS: Valve lesions are very often both regurgitant and obstructive at the same orifice, and more than one valve affected as well.

No allusion has been made to this fact in this paper, for the sake of clearness of description, but it must be borne in mind that no valve lesion can exist indefinitely without secondarily affecting other orifices, through dilatation and hypertrophy of the chambers. Then the endocarditis which caused the one lesion is more than likely to have involved other valves at the same time. Some of the most frequent of these combined lesions will now be discussed.

MITRAL REGURGITATION WITH STENOSIS: Mitral stenosis is almost never found at autopsy without a certain amount of insufficiency, yet in many cases the stenotic murmur was not heard ante mortem. If a case of mitral insufficiency is seen that gives a sharp, clicking first sound, at other times a presystolic murmur and thrill can be heard, a double mitral is present. Both murmurs need not be heard at the same time and often are not.

AORTIC REGURGITATION WITH MITRAL INSUFFICIENCY: Both valves may be primarily involved, in which case there may be double lesions at each, and all can be made out. Aortic insufficiency may, through dilatation of the left ventricle, cause relative mitral insuf-

ficency and the presystolic "Flint" murmur, when the valve itself is not diseased. This combination would give dilated and hypertrophied right heart, and the apex carried down as well as to the left. Murmurs corresponding to the lesions should be found, but the pulse of aortic regurgitation would be modified by the mitral lesion.

MITRAL AND TRICUSPID INSUFFICIENCY: The mitral element is easily recognized, not so the tricuspid. The murmurs are synchronous and the louder mitral obscures the other. Venous pulse in the neck and pulsation in the liver would make a diagnosis whether a murmur can be heard or not.

Some other murmurs require interpretation. These are "Functional," "Cardio-Respiratory," the "Flint" murmur, and certain exocardial friction sounds.

Functional murmurs are systolic in time, are heard in the pulmonary area, are loud in a reclining, are faint or inaudible in the erect posture. They present no evidence but the murmur itself of cardiac disease. They are sometimes near the apex, without the cardiac area.

Cardio-Respiratory are sounds made in the overlying lung by the heart. They are greatly influenced by respiration and position, being loudest at the end of forced inspiration, and diminish or disappear at the end of forced expiration and recumbency on the right side.

Friction sounds are pericardial or pleuritic. Bearing this in mind, it should not be difficult to exclude them.

FLINT'S MURMUR: In certain cases of aortic insufficiency, a rumbling, presystolic murmur is heard at the apex. This is thought to be a relative insufficiency, the regurgitant current from the aorta impinging on the anterior sheet of the mitral, obstructing the passage of blood from the auricle.

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DR. HOMER J. DUPUY and DR. E. O. TRAHAN.

MEETING OF MAY 11, 1907.

DR. CARROLL W. ALLEN read a paper entitled

Experiences with Atropin in some Acute Intestinal Disturbances.

I wish to report to this Society my experience with atropin in three cases of intestinal obstruction and one case of acute intestinal indigestion. In the latter case, I believe my experience was unique. In all, it was interesting and instructive and I hope will prove interesting, if not instructive, to my hearers. I had learned, some years ago, that large doses of atropin had been used successfully in acute intestinal obstruction, but did not have an opportunity of testing its efficacy until I went to Crowley to practice, in 1901.

I was called one night in consultation with Dr. Martin, of that town, to see a colored man who had been suffering with violent intestinal colic all the preceding day. He was cold and clammy. Subnormal temperature, pulse weak, abdomen distended, tense and painful on pressure, and with almost constant violent colicky pains. He had been given many medicines by mouth, most of which he vomited; those that he retained had no effect towards moving his bowels. High rectal enemas had been tried, which had either been retained or voided without results. Morphin by needle had been used to control the acuteness of the pain. We decided upon operation, but were forced to wait until daylight, as the place was poorly lighted. At my suggestion atropin was used in the meantime, 1-50 gr. by needle; as there was no result it was repeated in about an hour. Shortly the cramps began to abate, finally ceasing; the patient warmed up and took several naps. Several hours after the last hypodermic, he passed several copious evacuations and was

entirely relieved, the abdomen regaining its normal contour and consistency. Two other cases I have had since are almost parallel to this one, and it would be like a repetition to relate them, except that in one case three doses of atropin of 1-50 gr., with an hour's interval between each, were given.

The case of acute intestinal indigestion was a very trying one and difficult to control, and was seen in June, 1906, and is as follows:

Mrs. L., a middle aged lady, had been suffering for some hours with severe intestinal colic, vomiting and purging when I saw her. I had previously attended her and knew that she had a most pronounced idiosyncrasy for all of the opiates. I tried to quiet her stomach with small doses of calomel and local applications. She vomited the calomel, and citrate of magnesia fared no better. After using various other remedies during several hours of acute suffering for the patient, and as I had seen her once after taking an opiate, in which her condition was pitiful, I would not use them now, without her consent; this she refused. I thought of my experience with atropin in intestinal obstruction and decided to use it to the point of inhibiting peristalsis and intestinal reflexes; as I knew she had other idiosyncracies besides that for the opiates, I commenced cautiously with 1-100 of a grain. It had no apparent effect. In one-half hour I gave her 1-50 of a grain with still no effect. At the expiration of another half hour an additional 1-50 of a grain. She then felt some slight relief from the pain, but otherwise there was no effect from the atropia. The pupils were slightly dilated, but her vision and mind were clear. I waited an hour, by which time the vomiting had stopped but the abdominal pains showed a tendency to return. I then administered another 1-50 grain and in about three quarters of an hour another 1-50 as she showed no apparent effect from it other than the relief from pain. During the next few hours she had several small doses, until the aggregate quantity amounted to 1-8 of a grain during 5 or 6 hours. She was by this time perfectly quiet and had taken several naps. Her mind and vision seemed not the least affected. I had staid with her almost continuously during this time, and before leaving I gave her a bottle of citrate of magnesia and left her with a trained nurse. She slept fairly well during the night, being disturbed by

several copious evacuations. Next day her abdomen was very tender and she was quite weak, but otherwise there was no aftermath to her trying experience. The amount of atropia she took without disturbance seems almost incredible, and shows a tolerance to this drug as pronounced as is her unfavorable reaction to opiates.

The nature of the obstruction in the cases reported I can but surmise. I presume they were impactions. The physiological acting as an anti-spasmodic and stimulator of involuntary muscular fibres and in large doses, inhibiting reflexes and the involuntary muscles, while producing profuse intestinal secretion, explains its action here; and as a matter of speculation, it does not seem impossible that in a commencing intussusception or volvulus, the almost complete arrest of peristalsis might permit the bowel to regain its normal relations, whereas, a continuance of the peristalsis is what aggravates and serves to develop the condition.

In closing I wish to state that I hope these suggestions for the use of atropin will not in any way be taken as an argument against operation or encourage harmful delay in what seems to be a threatening condition; the interval of time between first seeing the patient, unless already in an institution, and preparing for operation, is ample to test the efficacy of atropin, as was done in the case I report in detail, as well as in one of the others, where operation was contemplated but also proved unnecessary.

DISCUSSION.

DR. STORCK: My experience with the use of atropin in cases of retained feces or impaction, bears out what Dr. Allen has said. I have used atropin by needle in a number of cases after drugs and enemata have been used without avail. Only recently I was called to see a patient who had been given a number of drugs, including drop doses of croton oil, also high enemata, to no effect. One sixtieth (1-60) grain of atropin was given by needle with almost magical effect. I have seen cases that must surely have gone to the surgeon had not atropin been used.

DR. GESSNER: Some years ago Dr. Terrett read before this Society a very interesting paper on the use of atropin in intestinal obstruction. Two years ago, I had a patient who, in the course of an attack of influenza, suddenly developed pain about the hepatic

flexure of the colon, with obstruction. Among other things, we used atropin, which seemed beneficial. General practitioners seem to forget the danger of giving drastic agents by the mouth in intestinal obstruction. Purgative enemata should be used in such cases. I certainly would use atropin freely, as Dr. Allen suggests; I think it is a valuable idea.

DR. ALLEN (in closing): I am very glad to know that others have had the same experience. Dr. Storck remarks that the effect is magical; it was very pronounced in two of my cases.

DR. E. M. HUMMEL, a guest of the Society, read a paper entitled

Etiologic Factors in Insanity.

In the general problems of psychiatry the question of personal factor enters so obtrusively that it is necessary upon approaching any case to investigate first the relative hereditary stability of the patient, and secondly, the direct or determining cause of mental breakdown. Even as regards the healthy personality it may be stated that every adult is his or her mental heritage modified by the environment experienced. These two grand determining factors in morbid psychology are reciprocal and complementary, commonly productive of inseparable results. We will consider them in turn, and the one we will designate hereditary predisposition, or susceptibility, the other stress.

Heredity.—The influences playing upon the embryonic plastic mass are first the racial endowments, which, having persisted from a remote period, have become firmly established. These are not to be controverted and inevitably override counter influences to ensure conformity of progeny to racial types. Next in potency are such proclivities as are peculiar to a family. Traits acquired by or entirely peculiar to an immediate parent are least apt to appear. It is seen then that as a parent is typical of its ancestral line in that particular, is the direct progeny most likely to present qualities of resemblance.

Again, obviously the offspring cannot appear precisely like either or both progenitors. In the conflict between proclivities from either parental side, ensuing upon conception and proceeding with embryonic development, the most potent nervous qualities survive at

the expense of the weaker, and the line of cleavage will be determined by the manner in which the two contending groups of forces affect an amalgamation. The weaker qualities will lie dormant in the individual now born, maybe to appear again in a succeeding generation, when lack of opposing influences or some atavistic chance favors their assuming expression, while the prepotent endowments from both parental sides will go to constitute the formula for the new personality. As a rule hereditary influences from either side will so balance that the child will reflect the attributes of both parents in proportionate degrees. Sometimes, however, it has the qualities of one or the other almost altogether, and sometimes apparently neither, the type reverting one or several generations to take up the characteristics of a remote ancestor.

Such in brief are the main elementary principles of the hereditary transmission of nervous qualities. When we apply these principles to degeneracy in heredity it will be noted that defective organization acquires transmissibility most certainly after it has existed in a stock several generations, and become firmly ingrained in the nerve plasma. The defect may lie dormant, escaping observation until it has become sufficiently dominating to effect marked neurotic or psychopathic results. Defective strain is retrogressive in tendency unless offset. It must usually operate through one side of the parental house, and it is a saving fact that modifying influences are contributed by the opposite parent. A defective tendency may exist but never get to the surface before it is bred out. The chief evil of consanguineous marriage is that in the event of there being present a defective streak in the family at large both parents contribute this tendency to the offspring.

When degeneracy does appear it is scarcely ever correct to look directly to the father or mother for all the onus, unless in the case of alcoholism, for almost invariably close scrutiny will reveal that the strain has extended, with graduating diminution, back to the third or fourth generation. Strictly acquired neuroses in father or mother are not so formidable, for the same reason, provided they are not of such nature or extent as to render the parent anergic in procreative capacity.

Incompatibility of the procreative elements is sometimes the cause of defective progeny. Well organized offspring is most apt

to ensue from individuals of proper dissimilarity. If the parties to the union are too much alike in nervous disposition their qualities, when combined, are apt to give rise to disproportion in some direction. Here arises another objection to consanguineous marriages. On the other hand, too great dissimilarity will be productive of deterioration through incompatibility, where widely different attributes, arriving from either side, fail to effect a fitting compromise, with defection or sterility as the result.

It need scarcely be mentioned that when an idiot or imbecile is born, heredity has failed signally, that the parents have not transmitted to their offspring sufficient vital momentum to ensure its development in high nerve qualities beyond the primary stages of childhood. These are, of course, the most radical kind of defectives. They are sterile, and represent the end product of a process that has gone on through several families, and probably left many lesser degrees of defection in its trail.

Less easily dealt with are those types which proceed normally until they reach one of the critical periods in the more advanced evolution of the personality—puberty or adolescence—where they take a slant and quit the path of normal development. Once more, the failure implies that the developmental forces have waned prematurely. Others still reach maturity and sustain attacks of alienation. The latter types have inherited a fair stability but have succumbed at a weak point in their organization.

There are certain epochal periods in the life history of the human organism at which disharmonies in nervous organization are most apt to manifest themselves. I refer to puberty, adolescence and the climacteric. When we bear in mind the enormous changes wrought in the personality during the sudden transition from childhood to manhood or womanhood we do not marvel that the mentality is rendered unstable and wobbly. The group of new psychic elements brought into play must find adjustment and must be made to harmonize in the new personality, and this requires shifting of the basis upon which the economy has been accustomed to function. Even the normal psychology of adolescence is abnormal when compared to that of staid maturity. When analyzed the developmental psychoses are often found to be in some manner linked with obliquities of the reproductive proclivity. In fact I believe that in many

of these conditions the procreative instincts, upon being born into virility, while performing circumutations, strike vicious adjustments and so disfigure the personality. Only too often, with improper surroundings, the buoyancy of adolescence, instead of finding vent in a natural and beneficial manner, is thwarted and suppressed by ill-advised educational methods or directed into morbid byways, which so beset the path of youth at this time. Now when this same function wanes to become obsolete the unstable organism is subjected to another commotion. Inversely the disturbing process is now one of involution, and while the psychoses of adolescence take on an exuberant turn, those incident to the climacteric are anergic. In this one instance the trouble arises from failure of redundant emotional energy to become accommodated naturally, while in the latter case the problem is that of filling a void.

Stress.—It may be said regarding the higher nerve levels that every man has his breaking point. The more stable the brain organization the more stress required to provoke mental dissolution, and *vice versa*. At one extreme of the scale we have the man of such staunch organization that the point at which sanity will be interrupted is little short of vital failure, while the less happily constituted one will go down before the first buffet of adversity. As implied in the preceding chapter, heredity is at times so poor that breakdown occurs spontaneously, or from trifling disturbance. These are, of course, congenitally defective, and are often enough bred by parents of insane temperament.

More in the domain of disease proper are those cases, in which the attack is precipitated by stress arriving from without, applied more or less directly to the central ganglia. In such instances it is proper to assume that the patient's nervous elements were so arranged and proportioned as to compromise his equipoise and present diminished resistance, but this susceptibility does not necessarily mean degeneracy, nor should it imply reproach; for which one of us may assert that we are immune to mental breakdown, unless we have experienced the extraordinary stress. There are sufficient reasons why this distinction between the different degrees of hereditary stability should be made, and this is where it is best drawn.

Insanities, caused chiefly by extraneous influences, are the more

interesting to us as physicians, because of their greater curability and similarity, because the disturbing factor can often be seen and avoided. The damaging influences are, however, frequently bound up in the life history of the individual, and so difficult to discover and weigh as to their relative importance. In like manner the trouble may be caused by a combination of contributing circumstances, no one of which in particular might have been sufficient. However, we will endeavor to point out some of the more prevalent agencies of stress to the brain structures.

Alcohol.—Owing to the great prevalence of its use and the selective affinity it displays for the high nerve tracts, undoubtedly works extensive havoc to the central nervous system of civilized man, and keeps its habitues—and their progeny—on a lower mental level than they would naturally attain. In at least two forms of insanity it is the sole determining cause, not to mention its more remote nervous effects. The man who keeps his body fluids constantly contaminated with, and his neurons soaked in, this drug is sure to sustain loss of his finer nervous attributes at least, and if his stability is poor, may become insane. Chronic alcoholics and their offspring go largely towards filling the jails and asylums of most civilized countries.

Opium and its alkaloids are responsible for considerable mischief to mental integrity. Demoralization is inevitably the result of its prolonged abuse. However, the psycho-neurotic types we frequently find addicted to its use, make it difficult to determine which is cause and which effect. *Cocain*, though less commonly used, has higher toxic powers, and is, therefore, comparatively more dangerous to sanity.

Further, there is at this time an excessive and ill-advised consumption of *sedative drugs generally*. The extent of damage people inflict on themselves with popular pain-killers is difficult to estimate, but it must be considerable.

The specific fevers, especially la grippe, scarlatina, diphtheria, erysipelas (facial), pneumonia, malaria, cerebral meningitis quite often injure the high brain levels. The bacteria of their causation elaborate toxins, which strike the delicate nerve structures directly. The frequency of deliria and affections of the peripheral nerves in

these diseases is sufficient proof of their virulence to neural tissue. At times, as we know, the bacteria find lodgment in the meninges and cortex and there, with other bacteria, establish metastases. If not fatal, they are apt to cause permanent insanities. Pneumococcus is quite liable to do this. The recent work of Southard and Keene demonstrated that in the persistently delirious and comatose forms of pneumonia, pneumococci, are found in large colonies in the cortex and meninges, oftentimes mixed with other bacteria, where they had set up purulent inflammations. Of course this means death, or dementia, if the patient should survive. Scarletina and diphtheria, being diseases of childhood, strike the neurons, with their toxins, in extreme youth, and therefore produce especially serious results; as injury to the brain ganglia is the more far reaching in its ultimate results, the earlier in developmental stages it is sustained. Many of the post-febrile deliria, as claimed by McPherson, are the result of hepatic insufficiency. This organ failing in its capacity to neutralize or eliminate deleterious substances, arriving via the portal vein, permits them to escape into the general circulation.

This brings us to the much discussed subject of *Auto-intoxication*. If Metchnikoff is correct in assuming that man's large intestine is nothing more than a portable cess-pool, a pathologic organ, evolved and exaggerated from habitual abuse inflicted through thousands of generations, it is small wonder that so many ills follow in the train of constipation, for, indeed, constipation is and has been a universal evil. Certain it is that numbers of deadly bacteria and chemical substances are found in the intestine regularly. It is not difficult to imagine a stray variety finding lodgment occasionally or one of the constant kind assuming undue virulence and breaking through the barriers of natural immunity to produce extraordinary harm and disease. Drs. Ford Robertson and McGrae, of the Pathological Laboratories of Royal Edinburgh Asylum and Scottish Asylums, think they have found the specific bacillus of paresis in cultures from the intestinal tube and other body tracts. Dr. Robertson demonstrated this bacillus to me, and explained his experimental work as far as he had carried it. Some of his experiments have been strikingly convincing; but, as he himself admits, much remains to be proven before his work may be considered conclusive.

Pregnancy and the puerperium hold many dangers for women of unstable poise. The shock of distocia, hemorrhage after labor and sepsis in the puerperium, with the peculiar state of the natural body metabolism at this time, are severe trials to the high nerve centers. Some break down under the stress of prolonged lactation after having traversed the more precarious stages of reproduction.

Trauma.—Though marvelously well arranged and protected in its bony cage, the cerebrum is quite often injured by forces applied directly to the head. According to varying circumstances will the force be spent upon the cerebral contents. Penetrating wounds and depressed fractures inflict focal damage, while concussions will be diffused universally over the cranial areas. Not infrequently the brain substance or vessels may be lacerated though there has been no fracture of bone. Especially to be noted are the delayed apoplexies, where the vessel wall is weakened by the injury and gives way later. The traumatic insanities, which most frequently engage our attention, are those due to diffuse concussion without there necessarily having been any macroscopic lesion. In these cases the jar has sufficed to disarrange the neuronc element of most recently evolved mechanisms, at least. According to Adolph Meyer, who has given these injuries special study, the immediate mental consequences are transient loss of consciousness, confusion, haziness of ideation, lapses in memory, especially for most recent events, and delirium, if meningitis supervene. The later, more permanent results are diminished psychic resistance, dizziness, headache, irritability, sensitiveness of head to sudden movements, difficulty of conception and judgment, loss of interest, special susceptibility to alcohol, tendency to impulse out-breaks, convulsions, traumatic epilepsy (Kraepelin). A curious feature of these psychoses in their more permanent stages is a tendency on the part of the patient to manufacture from the storehouse of memory whole circumstances and scenes, which they take as quite real. These concepts are constructed from memory tracings of past experiences, but are put together anachronously and irrelevantly, so as to give odd effects.

To be considered with the traumatic psychoses are those insanities occasionally precipitated by emotional shock, as fright, grief, or some intense and sudden play upon the emotional sensibilities

(psychic trauma). At first thought it seems odd that an extraneous, immaterial circumstance could effect to produce a decided insanity which implies organic brain changes. In this connection we must remember that the higher nerve elements are specialized to an extreme sensibility for effective impulse, which color all our intellectual processes. An intense, sudden and stormy interplay of nervous notion might overwhelm delicate mechanisms and produce structural alterations, just as an intense light does the retina. If the individual be unstable primarily a retrogressive train of molecular changes might be set up. I have seen at least one case which I knew to be provoked by a sudden fright. But at the risk of seeming prosy and untheatrical, we must say that insanity of such emotional causes is very rare, and when it does occur it must have started on a psychopathic foundation. Cases from all kinds of trauma make up about 3% of admissions to the larger asylums, where careful statistics have been kept.

Syphilis, being considered the most common cause of paresis, has, of course, an important place in the etiology of insanity. As in the case of other nervous diseases of its causation, paresis follows the primary syphilis remotely, and then the connection is often difficult to establish, a kind of parasymphilis.

Failure or overactivity of one of the *ductless glands* has nervous evils. We know something of the pathology of the thyroid and the general psycho-physiological disturbances accompanying its disease or destruction, and consequently understand cretinism and myxedema. Attention has recently been drawn to the *suprarenals* in their relation to nervous functions. It is probable that a great addition will be made to our knowledge of insanity when more is known of other similar structures in the body.

Sexual Irregularities. Unnatural, irregular and excessive sexual practices have a certain importance in relation to the neuro-psychoses. The subject is from its very nature difficult and elusive, and not enough definite information has even been collated to be turned to much account. The works of such men as Havelock Ellis, Kraft-Ebing, Schrenck-Notzing and others have been of service, but the subject is still vague. However, several general observations here are sufficiently obvious. Nature has been particular to ensure progeny in all species. To that end she has made

sexual affinity the second law of animal nature. In the case of civilized man the precepts of religion, social convention and the statutes of the law have prescribed the conditions under which sexual activities shall be countenanced. While these have contributed to good morals and are wholesome and indispensable in community relations they have never suppressed the illicit promptings of so imperative an instinct. We should not lose sight of the fact that under the conditions of modern civilization the sexual instinct is both overstimulated and unduly inhibited. The conditions under which matrimony is often contracted do not coincide with natural adaptations nor are matrimonial relations always practiced naturally when attained.

The disharmonies of sexual life have an especial bearing upon the hysteroneuroses. When a powerful impulse is not permitted to flow out along the natural channels of its expression it is apt to break its bounds and become diffused over the cenesthetic field to disorder the whole personality. This is the key to the explanation of many of the vagaries of hysterics and allied psycho-neurotics, as established by Janet, Freud, Brewer and others. Masturbation and the more unnatural excesses cause insanity occasionally, especially the neurasthenic forms. But it is difficult to distinguish cause from effect. It stands to reason that persons who surrender so readily to such excesses must have been unstable to begin with. Practical observation has convinced me of the prevalence of these morbid practices in the insane generally, from which the inference is warranted that upon destruction of the higher inhibitory powers abandon to the habit is the more ready.

CONCLUDING REMARKS. Realizing quite well the remote limitations of so vast a subject, I have endeavored for the most part to discuss the general principles under which the nervous diatheses originate, and the conditions under which they culminate in insanity. It would require volumes to enumerate every contributing influence in the etiology of insanity for these are legion, and in some instances unknown and beyond our ken, at least in the present status of psychiatry. Many probably of the determining causes are, however, well established, and I have mentioned the most of these. By way of summary I wish to emphasize the following points:

1. As regards its causation insanity is a problem of two variables, hereditary predisposition or susceptibility, and stress.

2. When regressive heredity becomes so accentuated as to amount to insane temperament it should be checked by interdiction of marriage to those so affected.

3. Mere susceptibility to mental breakdown under stress is not degeneracy in the enlightened acceptation of the term.

4. Stress is often involved in exceedingly complex circumstances inseparable from the life history of the individual and therefore frequently indeterminate.

5. Other factors are readily singled out, and may be avoided.

6. Others again are incident to civilized modes of life, together with the vices, dissipations and other irregularities into which man lapses because of his temptations and perversities. Civilization tends to evolve upward, but in so doing she throws an inordinate stress upon the brain by imposing more and more stringent requirements of efficiency.

7. Insanity is a disease, often a misfortune, never a disgrace.

DISCUSSION.

DR. DEMPSEY: I am very glad this discussion came up this evening. I would like to report a case of post-typhoidal mania that came under my observation recently. A young man 28 years old, a barkeeper for more than ten years, having gone into the business when quite young, he gave a history of having drunk at least ten drinks a day for a number of years. Four years ago he had typhoid fever lasting six weeks. One year ago he first came under my observation and treatment for alcoholism which I found impossible to control on account of his position, which, as he says, compelled him to drink. Six weeks ago I was called to see him and upon examining patient I found he had typhoid fever and after four weeks he developed mania. At times he appears rational and at other times very erratic. Yesterday he sent for all his relations, saying he was going to die; he made every preparation to do so.

DR. HUMMEL, in closing: I want to thank the gentlemen who have discussed this paper. With reference to some of the remarks of Dr. Van Wart relative to la grippe as a cause of insane at-

tacks, I am not ready to say that the specific germ of this disease damages the central neurons in such a manner as to bring about the mental phenomena in question. Rather might it be said that another kind of infection—perhaps an autointoxication from the intestinal contents—is enabled to work this havoc under auspices of the grippal attack, because of the lowered resistance thereby effected. However this may be, I have seen many cases of established insanity from various causation get worse after sustaining attacks of la grippe. During my incumbency as a medical officer of our State asylum I had the opportunity to witness these effects of an epidemic of la grippe. Many cases were temporarily made worse, while others were hastened into terminal dementia. What Dr. Van Wart has said as to the pneumococcus causing death and dementia through lodgment in the meninges is very true. I emphasized this in my paper. We should be wary of the persistently delirious pneumonias, especially during convalescence.

Autointoxication is undoubtedly an important causative factor in mental diseases. Just how or from what source in the body the toxic substance is absorbed we cannot say now. Neither do we know the nature of the damaging agent. We know that all trophic impulses (and resistance against deleterious agencies) is resident in the central neurons. If the fountain source of trophic power is reduced by disease even an ordinary intoxication will assume expression in disorder of nervous function when not offset, annulled or counteracted by the normal vital resistance. Not only may the ordinary chemical substances and bacteria native to the body (in that they are practically always with us) create disorder by taking the nervous system at a disadvantage, but they may also become unduly virulent or new varieties may be generated. I have in mind a case of autointoxication I treated at our State institution. Incidentally I may say the patient had been chloroformed by her physician almost continually for 24 or 36 hours, to keep her quiet. Afterward the relatives administered the chloroform themselves, so that for an interval of several days the patient must have been nearly continually under the influence of the drug. When she was brought to the asylum her husband brought the empty bottles along. There must have been a peck of two-ounce bottles. She had presumably inhaled that quantity

of chloroform, marvelous though it seems. I recognized the case as one of autointoxication. She was intensely jaundiced, constipated and with tongue and breath, slight fever (101°), urine showed about 3% albumen, and was scanty. Her mental condition was that of a delirium, as so many cases of autointoxication are. In this instance we must subtract from the physical picture the probable influences of the chloroform. This case responded beautifully to purgation and hydrotherapy, and was well, completely so, in 2 weeks.

In regard to Dr. Forbes Robertson's theory as to the bacterial causation of paresis, I saw the bacillus he has isolated from the body fluids of paretic patients and which he thinks is the specific cause of disease. It resembles very much the Klebs-Loeffler bacillus. At that time he was undecided whether it was the diphtheroid bacillus in an attenuated form or another subvariety of the same species. Dr. Robertson has established some facts in connection with his discovery which entitles his claims to serious consideration. Dr. Van Wart is of the opinion that his theory has been much weakened, but it was my impression that further observation had had the tendency rather to strengthen his position. I am ready to take hold of the new theory of the causation of paresis because it enables us to explain many of the phenomena of the disease heretofore inexplicable, and because it promises us some recourse in prevention and treatment of this now universally fatal malady.

As to the case Dr. Dempsey has briefly reported. I would be afraid to express an opinion regarding his patient. It may be that his case would fall under one of the classical insanities, in which event the prognosis would be in his manner to be determined.

Again I wish to thank those who have participated in this discussion, especially Dr. Van Wart, who has spoken at some length. Also I wish to thank the society for the courtesy extended me.

MEETING OF MAY 25, 1907.

DR. J. T. HALSEY read a paper entitled:

Some things which the General Practitioner can and should do with the Stomach Tube.

Those who have not been accustomed to regular use of the

stomach tube are, as a rule, somewhat appalled by the apparent complexity and difficulties of modern methods of stomach diagnosis. While these methods all have their usefulness, and while we should be familiar with their general scope and significance, there is no doubt that the busy general practitioner will rarely have time and opportunity to apply them in their entirety.

The careful quantitative chemical analysis, the more or less successful attempts to determine the exact amounts of stomach contents under certain conditions, the fermentation tests, elaborate microscopic examinations, etc., are certainly of great value in diagnosis, but are methods which only those devoting especial attention to diseases of the digestion, will be able to use extensively. It is both possible and eminently desirable, however, that at the commencement of their careers, our younger professional brothers should practice them.

The trend of progress in diagnosis of stomach conditions has been in the direction of laying stress on minor quantitative changes in the chemical composition of the stomach contents and more on certain quantitative changes, and still more on the investigation of the motor function of the stomach.

What then should be the course of the general practitioner when confronted with cases of indigestion? The author is not one to preach the doctrine that each and every such case should immediately be obliged to swallow 20 inches of unappetizing and nauseating rubber, but he does believe that cases of continued or severe stomach disturbance should do so. The neglect on the part of the general practitioner to insist on this is the chief reason why so very many patients seek surgical relief either not at all, or too late.

Even the busiest physician can, the author believes, carry out the following procedures in any of the above mentioned class of cases. First investigate the motile function of the stomach by having the patient eat a hearty meal in the evening and fasting until his stomach is washed out the next morning. The presence of food even in minute amounts under these conditions is extremely significant. If on repetition this finding is constant it is very suspicious of obstruction or cancer with the exception that in that very rare condition known as gastro-succorhea, the stomach often is extremely slow in emptying itself. If the stomach is empty

after fasting all night, it is well to wash it out at the end of seven, six, and five hours after a hearty meal, remembering that a normal stomach should be empty five hours after a full meal.

In the author's experience, failure of the stomach to empty itself in seven hours has in a large majority of cases been due to some condition calling for operative interference, such as ulcer, cancer, stricture of the pylorus, gall bladder disease, or adhesions about the pylorus.

For the general practitioner the test breakfast should, in the author's opinion, be utilized somewhat as follows: The patient, after fasting all night, should eat one and one-half shredded wheat biscuits, chewing them thoroughly, and should drink one and one-half glasses of cool (not iced) water. One hour later the stomach should be emptied, the contents measured and tested for free acid (1), lactic acid (2), and blood (3). More than 150 c. c. stomach contents indicates delayed motility. Constant or frequent absence of free acid is of much importance but of varied significance. Lactic acid speaks strongly for obstruction at or near the pylorus, or the existence of cancer. Blood usually is found in cases of cancer of the stomach, if sought for several times. Its absence, therefore, is strongly against cancer (5). It may or may not be present in cases of ulcer, and it should be remembered that blood removed from the stomach may come from the esophagus, mouth, nasopharynx or lungs. Gastric hemorrhages also occur in a large number of conditions affecting the stomach, secondarily of which cirrhosis, nephritis, cardiac insufficiency, severe and pernicious anemias may be mentioned, and lastly small amounts of blood may be due to stomach tube.

(1). Free acid is usually free HCL., is readily tested for by adding a drop of Topfer's reagent ($\frac{1}{2}\%$ alcoholic solution of dimethylamido azobenzol) to the filtered stomach contents.

(2). Lactic acid can be readily tested for as follows: Three parts of filtered stomach contents, one part of ether and a few drops of HCL are shaken together in a test tube. The supernatant ether is then added to an almost colorless water solution of chloride of iron. If lactic acid is present a distinct yellow or brownish color results.

(3) The most delicate practical test for blood is the Benzidin

Reaction (see Dr. Storck's paper). The examination for blood can be done after a lapse of some time. Specimens therefore, can be sent to a laboratory at a distance.

(4). In 609 cases without gastric cancer (Emerson Clinical Diagnosis, p. 349) lactic acid was present in 30 cases, which were all cases of subacidity with no free HCL. In the author's experience lactic acid has been found in non-cancerous cases in a much larger percentage than in Emerson's cases.

(5). The author has frequently been able to give a more favorable prognosis in cases strongly suggestive of cancer because repeated examination of stomach contents and feces had failed to demonstrate the presence of blood therein. This is of great importance in view of the difficulty of getting patients to consent to exploratory operation in a case simulating gastric cancer, but where there is reasonable ground for hoping that a less serious condition may be present, and therefore a more hopeful prognosis may be given.

DISCUSSION.

DR. SALATICH: I have used the stomach tube recently in three cases with good results. First case was that of a young woman with a condition of motor insufficiency. I prescribed several remedies without any relief. She complained of fullness in the epigastrium six or seven hours after meals. After using above with no result I advised using the stomach tube. The first lavage brought about a pint of fermenting, slightly offensive food. This was seven hours after morning meal. I used the stomach tube every second day. After using it for four days she improved considerably and the amount of residual food diminished at the end of the sixth washing, seven hours after meals, no food was found in the stomach.

The second case was one of which we see a good many—alcoholic gastritis. This patient would vomit every morning, and nothing seemed to help him. I used the stomach tube. After the third application the patient stopped vomiting. I continued the lavage for two weeks longer, giving him three lavages a week.

The third case was a cancer of the greater curvature. This

patient would vomit after each meal. After using the tube for two weeks he vomited only once every third or fourth day.

DR. SIMON: Dr. Halsey has brought up a very interesting point in his paper in regard to the use of the stomach tube in the diagnosis of the various forms of gastric insufficiency. The failure of the stomach to empty itself within proper limits may be due either to some physical obstruction at the pylorus, or to a weakness of the stomach muscle itself, the so-called gastric myasthenia. This latter condition, it has been claimed by a certain school of specialists, is of little practical importance, all gastric insufficiencies, according to this view, being due to some actual obstruction. This I think is entirely too radical a view. On the contrary, I have become convinced that a real myasthenia of the gastric muscle producing well marked stagnation of the stomach contents is by no means a rare condition.

An actual pyloric obstruction has a many sided etiology, the most frequent being old ulcer scars and carcinoma. The importance of detecting a beginning motor insufficiency in the early diagnosis of pyloric carcinoma can scarcely be overdrawn. Since 60 per cent of all stomach cancers are at the pylorus, it can be easily understood how important the early detection of a stagnation of the stomach contents is for the diagnosis of this disease. Every case, which on first examination shows evidence of gastric insufficiency, becomes at once suspicious of carcinoma, until proven otherwise. In view of the importance of an early diagnosis of carcinoma, I think this is a safe rule to adopt in practice.

In the diagnosis of our stomach diseases we are laying much less stress to-day upon mere chemical findings than we did formerly. The stomach having come to be considered largely a preparatory organ for the further digestion of the food in the upper intestine, the proper propulsion of the food becomes of relative more importance than the mere chemical variability of the gastric juice. However, a careful interpretation of chemical findings is still of great assistance in diagnosis. Since Dr. Halsey has brought up the question of lactic acid, I would like to say one word in regard to its importance. Lactic acid is only produced in the stomach when there is a stagnation of the contents, plus a marked reduction or total absence of hydrochloric acid, the two conditions

present in a carcinoma at the pylorus. Without an obstruction at the pylorus there can be no lactic acid produced in the stomach. In this connection I would like to warn against too hasty conclusions being drawn from the mere presence of traces of lactic acid after the test breakfast. The bread used in the test may already contain some lactic acid, so that if any doubt is entertained as to this, it is well to use the Boas' test of oatmeal and water, instead of the Ewald bread and water breakfast.

With the clear cut understanding of the chemical findings along with the positive detection of a motor insufficiency so clearly brought out in Dr. Halsey's paper, the diagnosis of stomach diseases becomes sharply defined and not at all difficult.

DR. LE BEUF: I understand Dr. Halsey to say whenever food stays over 5 to 8 hours in the stomach it indicates some obstructive lesion of the pylorus, or motor insufficiency in the stomach. I remember a number of cases of dilatation, one very recent, a very large man, weighing about 300 pounds, who had undertaken to reduce in weight by diet and frequent stomach tube lavages. I think this is a very injurious thing. This man had a stomach 20 inches long by 11 inches wide in size. After four or five months of negative treatment I gave him a considerable amount of water by mouth and two meals a day by high rectal tube, consisting of two raw eggs and peptonized milk. This was kept up three weeks and he has now completely recovered, and is down to practically a normal stomach. I could not cure all cases by this process, but it seems to me there ought to be a conservative point. This old method might be a good method to allow cases of muscular paralysis and of too great irritation of the pylorus to rest. While using this rectal feeding the patient is kept on his back, or on a sofa all the time. Large doses of bismuth subnitrate were given also per os during this period.

DR. STORCK: The question of stasis is an important one, and we must exercise caution in expressing an opinion. The following case came under my observation—a case of motor insufficiency with a palpable tumor at the pylorus, hydrochloric acid reduced, small quantities of lactic acid present, and ferments present. This case was thought by several physicians to be one of carcinoma. Gastro-enterostomy was performed and a thickening of the pyloric open-

ing was found. It is now six years since this patient was operated upon, and he is now well. The possibility of simple myasthenia should not be lost sight of. It is also well to remember those cases of acute dilatation of stomach occurring after typhoid fever.

In this connection, with Dr. Halsey's permission, I would like to show a simple device for obtaining stomach contents when the ordinary means of compression fail. As you see, the contrivance consists of a glass T tube, rubber tubing, and some suction method—the lips, rubber bulb, or a Politzer bag answers the purpose admirably. When the stomach tube is in place, the end of the T tube opposite the one with which the rubber tube connects, is attached to the stomach tube, the free end of the tube is closed by means of the index finger, and suction is applied to the rubber tube by means of the lips or a Politzer bag. If the Politzer bag is used, it is first compressed before closing the lower end of the glass T tube with the finger. As soon as fluid makes its appearance in the glass tube the finger is withdrawn and the fluid is collected in a suitable vessel.

DR. DABNEY: I have had a good many cases of this kind that closely simulated cancer. Without washing stomach or emptying rectum, but by using whey, buttermilk if possible, given every day, it will certainly relieve obstruction. Whey will cure about $\frac{3}{4}$ of these cases, which are supposed to be cancer, but which die of lack of motility.

DR. HALSEY, in closing: The data given by Dr. Salatich in the cases which he mentions are not sufficient to allow me to make diagnoses. I see, however, no sufficient reason to diagnose cancer in these cases or organic obstruction at the pylorus. Although the therapeutic uses of the stomach tube were not touched on in my paper, in reply to Dr. Le Beuf I wish to say that where there is delayed emptying of the stomach lavage often gives partial or complete relief, which may or may not be permanent. The therapeutic results will depend chiefly on the cause of this delayed emptying.

Among other points Dr. Simon mentions gastric myasthenia as a cause of delayed emptying of the stomach. Undoubtedly muscular weakness is a cause of delayed motility, but my own opinion is that a diagnosis of gastric myasthenia is a dangerous one, nearly

as dangerous as that of neurasthenia, and one to be made only after very careful observation and study of a case, and of the careful exclusion of the other causes of delayed motility. My own experience has been that in a majority of cases where the stomach does not empty itself in seven or more hours, a surgical condition was present.

Lactic acid certainly does not mean cancer of the stomach, but it is often present in cancer cases. Within the last month I have seen two cases where lactic acid was found in large amounts, but no diagnosis of cancer was made, and at operation no cancer was found.

Dr. Elliot speaks of cases where cancer was diagnosed because lactic acid was found and which proved not to be cancer. This is a common experience, but should be less common than it is, and is a mistake seldom made by competent stomach men, although undoubtedly it will continue to occur. In one case, and to which he refers, no diagnosis of cancer was made, but in considering the case cancer was among the conditions suspected.

Dr. Dabney speaks of the value of whey and buttermilk in feeding cases with delayed motility. He is certainly correct. They are nutritious, non-irritating and digestible foods, which readily pass through a partly obstructed pylorus. Their use often does away with the necessity of using lavage.

In conclusion would restate the position taken by me in my paper. I believe that in any case where the stomach fails to empty itself within seven or eight hours after an ordinary hearty meal, the presumption is that there exists some condition calling for surgical interference. Such cases should be carefully and patiently studied and a surgeon should usually be consulted, but his advice should not be followed blindly.

DR. J. A. STORCK read a paper entitled

**The Detection and Significance of Occult Blood in the
Feces and Stomach Contents, with Special Reference
to the Value of the Adlers' Benzidin Test.**

DEFINITION—By the use of the term occult blood we mean blood which is invisible to the naked eye, and which, therefore,

requires the intervention of some chemical agent, or optical means, for its determination.

INTRODUCTION—The determination of minimal hemorrhages by some simple chemical method must have long occupied the thoughts of clinicians; but it remained for Weber¹, in 1893, to devise the guaiac test which bears his name, and which, with slight modification up to the time of the introduction of the Adlers'² benzidin test, held, with Rossel's³ aloin test, the distinction of being the only two tests that had survived from among the many proposed from time to time.

Just here, it is well to call attention to the debt of gratitude which we owe to Boas for his persistent and intelligent advocacy of the value of the determination of minimal amounts of blood in the stomach contents and feces, particularly in the diagnosis of gastric or duodenal ulcer, and gastro-intestinal cancer.

While it is true, perhaps, that the determination of occult blood gives us the most valuable information in conditions mentioned above, yet the fact must not be lost sight of that in numerous other instances blood may be present, namely, cirrhosis of the liver, hemorrhages, pancreatitis, hemophilia, amyloid disease, purpura, scurvy, typhoid fever, tubercular or syphilitic ulcer or abrasions, fissure, fistula of rectum, hemorrhoids, severe forms of uremia, certain toxic conditions, some phases of arterio-sclerosis, and gastric crises of tabes dorsalis. I have also found blood in one case of uncinariasis. In hemoptysis, epistaxis, or bleeding from the gums, lingual body or esophagus, the blood may be swallowed, thereby becoming a feature of the stomach contents or feces; for, it must be remembered that, with all tests, as little as .5 gram. of ingested blood will give positive reaction in the feces. Bleeding may be caused also by introduction of stomach tube or other instruments; likewise from the use of rectal speculum or syringe tube, and find its way into stomach contents, or feces. During menstruation blood might be an accidental ingredient of feces.

Now, it might be argued that, if blood is present in as many conditions as those enumerated above, the possibility of error is great. While this may be true, in a measure, yet it must be remembered that the finding of blood in the feces is not advanced as infallible evidence of any particular disease. Nevertheless, its per-

sistent or occasional presence, or its entire absence, coupled with careful clinical observation, strengthens our diagnosis and prognosis, and determines treatment in several protean diseases; namely, gastric or duodenal ulcer, and gastro-intestinal cancer. The disappearance of occult blood in the feces in gastric or duodenal ulcer is a valuable guide as to when treatment can, with safety, be stopped.

From what has been said, it will be seen readily that the detection of occult blood in the stomach contents, but more especially in the feces, will prove of great import to the clinician.

This much being granted, it is well to consider the different means and tests for the detection of occult blood. But, before entering into consideration of the methods used to detect small quantities of blood in the stomach contents, and particularly in the feces, a few words may be said in regard to the microscopic means which is often relied upon.

MACROSCOPIC INSPECTION—For the most part this is the means usually resorted to in pronouncing on the presence or absence of blood in the stomach contents or feces. When such is the means employed, the element of error is, indeed, great; for, I have determined that as much as 6 grams of blood might be ingested without giving to the naked eye any evidence of its presence in the feces. So, the naked eye as a means of detecting even quite an extensive hemorrhage in the stomach or small intestine might be ineffectual.

We will now take up the possibility of detecting small quantities of blood by means of the microscope.

MICROSCOPIC DEMONSTRATION—Owing to the distortion of the red blood cells, their detection microscopically is extremely difficult. Boas ⁴ says: "Even where the stools were intensely red colored, Nothnagel never could find erythrocytes in fresh hemorrhages of typhoid fever." It will be seen, therefore, that the detection of small quantities of blood in the feces by means of the microscope is not practicable.

MICRO-CHEMICAL DEMONSTRATION—Teichmann's hematin crystal test is, as a rule, unsatisfactory for the determination of occult blood in the feces.

SPECTROSCOPIC DEMONSTRATION—This means of detecting minimal amounts of blood in the stomach contents and feces would

appear to be all that could be desired. In so far as the detection of blood in the stomach contents is concerned, it is eminently successful. But, when applied to the feces, it often happens that the spectrum is obscured by the normal pigments, even in the presence of considerable quantities of blood; and it should also be remembered that hematin is very imperfectly soluble in water.

Sahli⁵ has suggested a method of overcoming the objections mentioned above. I have followed his method in a number of instances, and I find it satisfactory. I use a direct vision spectroscope, Bausch and Lomb No. 16,586. Owing to the length of time and the care required in using the spectroscope according to Sahli's suggestions, I do not think that this method will become popular with the general practitioner.

CHEMICAL TESTS—It may clearly be seen that the optical methods for the determination of occult blood are, for the most part, unreliable; therefore we are compelled to resort to chemical measures. The best known among such tests are Weber's guaiac test, with its modifications by Boas and others, and Rossel's aloin test. Each of these tests has its strong advocates.

When the reaction is typical, it is clear blue with the guaiac, and cherry or pink with the aloin test; but, often a shade of green, reddish brown, or brown appears.

The question as to the significance of these off-colors is a most important one. For instance, Schmilinsky claims that these colors are due to faint traces of blood; while Clemm, Schloss and Boas consider them negative. My own conclusions coincide with those of Schmilinsky; but, view it as you may, there is an element of doubt concerning these off-colors which is bewildering. These tests in my hands have given good results when used to test stomach contents for blood, but are not reliable when used to detect small quantities of blood in the feces.

O. AND A. ADLER TEST—As the main purpose of my paper is to bring forward a new test by O. and A. Adler, I will close this brief mention of the guaiac and aloin tests, on which those particularly interested will find excellent articles by Steele and Butt⁶, D. M. Cowie⁷ and F. W. White⁸.

TEST DIET—Preparatory to making Adlers' test for occult blood, care must be exercised that the patient has not ingested anything

which might give a misleading reaction. The diet should be free from hemoglobin. It is advisable, therefore, that the patient abstain from meats and vegetables; also, be careful to take **no preparation** of iron for at least thirty-six hours previous to the application of the test. I find it safe practice to restrict the diet to milk and cereals. It has been suggested to mark off the stools with charcoal so as to keep better tab on them; but, while I have used it in a number of instances, I do not see any special advantage in the practice. Whenever I am in doubt concerning the length of time the feces has been in the intestines, I administer a mild laxative and begin my tests anew.

ADLERS' BENZIDIN TEST—The special test under consideration was proposed by O. and A. Adler, and is conducted as follows:

The sample of feces or stomach contents is stirred with water to a thick paste. About 4 or 5 c. c. is then placed in a test tube, and 1 c. c. of glacial acetic acid is added. After shaking the tube, 2 c. c. of a freshly prepared concentrated solution of pure benzidin in 90 per cent alcohol, heated, is added, with an equal amount of hydrogen dioxid. If there are even minimal traces of blood, the color turns, almost at once, a deep green, which passes into a bluish green if there is much blood. In the presence of very large quantities of blood, the color is almost black. The tint gradually fades into a dirty brown. This test is more easily applied than either the aloin or guaiac test, and is much more sensitive, being in the ratio of 1 to 200, or against 1 to 10,000 in the guaiac and aloin tests.

Boas⁹, Ewald¹⁰, and Schumm¹¹ claim that the test is too delicate for clinical use. On the other hand, after applying the test during the course of eighteen months, Oettinger and Girault¹² state that they found the Adlers' technic absolutely reliable and **far more** sensitive than the Weber and other tests. E. Schlesinger and F. Holst¹³ (Strauss clinic, Berlin), after a comparative study of the various tests for occult blood in the stomach contents and feces, make similar report. The favorable reports cited above coincide with my own findings in the matter.

SCHLESINGER AND HOLST MODIFICATION—The following modification of Adlers' test made by Schlesinger and Holst is claimed

by them to assure greater accuracy, and to eliminate some sources of error. Twelve drops of a concentrated solution of benzidin in glacial acid is poured into a test tube, and 3 c. c. of a 3 per cent solution of hydrogen dioxid is added.

A piece of feces about the size of a bean is stirred into a test tube 10 c .m. long and one-fifth full of water. The tube is plugged with cotton, and the suspension of fecal matter is heated to boiling. Several drops of this suspension of feces is added to the test tube containing the acetic acid, benzidin and hydrogen dioxid.

The reaction, when positive, is the same as in Adlers' test.

I have used this modified test a number of times and find that it has no advantage over the original Adlers' method.

PRECAUTIONS—A few words of caution may be necessary in regard to making the test. It is of the utmost importance that the chemicals be pure, and be kept in well-stoppered containers, away from any possible source of contamination. The utensils and surroundings, including hands of the operator, should be kept scrupulously clean, as the slightest impurity might produce a reaction which might cause false deductions. The caution of cleanliness also applies to the vessel in which the stool is collected.

If the stool is hard, examine it on the outside. If blood shows there, the blood, in all probability, comes from the rectum, sigmoid flexure, or lower colon. Also take a specimen from the interior of hard feces, for when blood comes from the stomach or small intestine it is more intimately mixed with the feces. When the stool is soft, it must be thoroughly mixed before taking a specimen for testing.

MEAT DIET EXPERIMENTS—These experiments were conducted to see under what conditions the ingestion of meat would influence the test for blood. It was found that the feces of patients, who took meat well cooked in small quantities, seldom gave positive reaction. If rare meat were taken, even in small quantities of 4 grammes, the reaction was as a rule positive, this especially being true if peristalsis was active. When quantities of rare meat above 30 grams were taken, the reaction was always positive, even though it was retained in the intestines for fourteen or sixteen hours. Should the test for occult blood be made while the patient

is being fed per rectum, care should be exercised that none of the food used gives the reaction for blood; also that no abrasion result from the introduction of the feeding tube.

Adlers' test was used in all the experiments which follow:

EXPERIMENT I—F. and S. were on diet of vegetables, milk and cereals, with about 10 grams of well cooked meat allowed daily. A part of the 24 hour feces was used. Reaction in both cases negative.

EXPERIMENT II—F. and W. Diet: Vegetables, milk and cereals, with about 30 grams of rare meat. A part of the 24 hour feces was used. Both gave positive reaction.

EXPERIMENT III—Three patients whose stools had been previously proven free of blood were selected. They were all large meat eaters, and were allowed a full diet, with their full quota of meat (amount not known). A sample of feces taken from the twenty-four hour amount gave positive reaction in every instance.

The above cited experiments prove the necessity of excluding meat during the search for blood.

EXPERIMENT IV—Blood Ingestion Experiments. F. and W. ingested .5 grams of ox-blood and specimens of the stools passed during 24 hours were tested. Reaction in both instances positive.

This experiment shows that even a minimal hemorrhage anywhere from the mouth to the anus would be detected by the test.

EXPERIMENT V—Blood Admixture Experiment. In this experiment .0006 grams of blood was added to 1 gram of feces, and gave a positive reaction.

These experiments were made for the purpose of determining to what extent blood could be mixed with the feces without being visible to the naked eye.

In number one, 1 gram of blood to 30 grams of feces were used; in number two, 3 grams of blood to 30 grams of feces were used; in number three, 5 grams of blood to 30 grams of feces were used. These specimens were then submitted to several persons, who failed to recognize blood, proving that quite an extensive amount of blood might be present and escape detection by the naked eye when intimately mixed with the feces.

My experiments with Adlers' test show that the presence of even as much as .4 per cent of hydrochloric acid, .2 per cent of

lactic, or .2 per cent butyric acid, does not interfere with a clear reaction. I have proved that the Adlers' test does not react to milk or pus.

BOAS' NEW TEST—A recent test brought forward by Boas is a 1/2000 solution of chlorhydrate of phenylendiamine. I have used it several times and see no advantage over the guaiac or aloin test, and it is not so reliable as the Adlers' benzidin test. ”

My clinical experiences with the Adler benzidin test comprises the following cases:

I. Mr. G., *æt.* 34; white; somewhat emaciated; epigastric pain after food; vomits, but no evidence of blood to naked eye. Stomach contents, Adler's test, positive. Free HCL, total acidity 80. Feces occasionally showed positive with Adler's test. Tallquist, 45.

Diagnosis: Gastric ulcer.

Treatment: Rest in bed, rectal alimentation, bismuth and alkali.

II. Miss Y., *æt.* 30; white; vomited blood on one occasion; epigastric pain after food and on pressure. Stomach contents, Adlers' test, positive. Free HCL, total acidity 85. Feces, six examinations, Adlers' test, positive. Tallquist, 60.

Diagnosis: Gastric ulcer.

Treatment: Rest in bed, rectal alimentation, bismuth and argyrol.

This patient was not allowed to leave bed until three examinations showed the feces to be free of blood. Recovery.

III. Mr. M., *æt.* 74; white; rapid loss of flesh; absent free HCL; present, Boas-Oppler bacilli; lactic acid. Adlers' test, positive. Large diffused mass in epigastrium. Twelve examinations of feces, Adlers' test, positive.

Diagnosis: Carcinoma of stomach.

Result: Death.

IV. Mr. V., *æt.* 72; white; well up to three months of applying to me, somewhat emaciated. Vomits every day; never any visible blood. Adlers' test, positive. Absence of free HCL; present, Boas-Oppler bacilli; lactic acid. Small mass felt at pylorus. Eight examinations of feces, Adlers' test, positive.

Diagnosis: Carcinoma of stomach.

Refused operation.

V. Male, *æt.* 18; anemic; red blood cells 3,000,000; leucocytes

40,000; Tallquist, 40. Large quantities of eggs found in stools. Adlers' test, positive.

Treatment: Thymol, male-fern.

VI. Male, *æt.* 45; loss of weight; aversion to meat; pressure and fulness in the stomach; eructations; vomiting at times; diarrhea. Free HCL absent; trace of lactic acid; albumin disc **unaltered**. Adlers' test, negative for stomach contents and feces.

Diagnosis: Achylia gastrica.

VII. Female, *æt.* 35; single; neurotic; no fever; appetite capricious; burning pain independent of food; pressure points over the intestinal plexuses. Free HCL. T. A. 65. Albumin disc digested. Adlers' test, stomach contents and feces **negative in four** examinations.

Diagnosis: Nervous gastralgia.

VIII. Female, *æt.* 48; menopause; epigastric pulsation; constipation; eructations of odorless gas; appetite poor; pressure points over the intestinal plexuses. Free HCL. T. A. 60. Adlers' test, stomach contents and feces, negative in three examinations.

Diagnosis: Nervous gastralgia.

IX. Female, *æt.* 38; in good flesh; diffuse painfulness of pressure over entire region of stomach; can eat elaborate dinner when in good humor; at other times belching and heartburn at psychic depression; peristaltic unrest. Free HCL. T. A. 58. Adlers' test, stomach contents and feces, negative in two examinations.

Diagnosis: Neurasthenia Gastrica.

X. Male, *æt.* 41; circumscribed pain in epigastrium, resistance; nausea after food. Free HCL. T. A. 90. Adlers' test, positive. Tallquist, 50. Four examinations of feces, Adlers' test, positive.

Diagnosis: Gastric ulcer.

Treatment: Rest in bed, rectal feeding, bismuth, argyrol.

Results: Disappearance of blood and improvement of symptoms.

XI. Male, *æt.* 37; emaciated, pain in epigastrium constant about one hour after food; at times vomits acid masses. Free HCL. T. A. 85. Adlers' test, negative in eight examinations. Tallquist, 60. Six examinations of feces, Adlers' test, **negative**.

Diagnosis: Hyperchloridia.

XII. Male, *æt.* 33; vomits and regurgitates sour fluid and food half to two hours after eating; pain. Free HCL. T. A. 95. Adlers' test in five examinations, negative. Tallquist, 70. Three examinations of feces, Adlers' test, negative.

Diagnosis: Hyperchloridia.

XIII. Male, *æt.* 29; in good flesh; burning sensation in stomach about one hour after food; sometimes vomits acid masses, never blood. Free HCL. T. A. 82. Adlers' test, four examinations, negative. Tallquist, 85. Four examinations of feces, Adlers' test, negative.

Diagnosis: Hyperchloridia.

XIV. Male, *æt.* 64; for past eight years regurgitates sour fluid and food; constipated. Free HCL. T. A. 92. Two examinations, Adlers' test, negative. Tallquist, 70. Five examinations of feces, Adlers' test, negative.

Diagnosis: Hyperchloridia.

XV. Female, *æt.* 19; loss of weight; pain after food; sometimes vomits acid masses, never blood. Free HCL. T. A. 90. Eight examinations, Adlers' test, negative. Tallquist, 40. Six examinations of feces, Adlers' test, negative.

Diagnosis: Hyperchloridia.

XVI. Male, *æt.* 42; pain almost constantly between 12 p. m. and 2 a. m.; stomach emptied at night; tube introduced next morning before food or drink was allowed. Frequently obtained from 40 to 65 c. c. of acid fluid. Free HCL. T. A. 80. Six examinations, Adlers' test, negative. Tallquist, 70. Three examinations of feces, Adlers' test, negative.

Diagnosis: Hypersecretion with hyperacidity.

CONCLUSIONS.

1. It should become routine practice to examine the feces of all cases of gastro-intestinal diseases, or other internal diseases, when the symptoms are not well defined.

2. In a person past middle life and showing gastro-intestinal symptoms, the persistent presence of occult blood in the feces argues in favor of gastro-intestinal cancer. When blood is once discovered in cancer, it is constantly encountered, irrespective of diet.

Occult blood does not make its appearance in the stools, in carcinoma, until ulceration has begun.

3. Occasional findings of blood point to ulcer. The blood may entirely disappear under proper treatment and care.

4. A hemorrhage not exceeding .5 grams anywhere from the mouth and throughout the gastro-intestinal tract will give a positive reaction.

5. The absence of occult blood is of great diagnostic value; for, in its persistent absence, after careful searching, we are justified in assuming the absence of cancer of gastro-intestinal origin, or gastric or duodenal ulcer.

6. A positive reaction obtained on but one examination is of little value, unless supplemented by other diagnostic data, as there are many trivial causes, and considerable accidental contamination which might be responsible for a positive reaction.

7. The Adlers' test is the most satisfactory, both as regards accuracy and ease of application. The great value of this test resides in the fact that, when no reaction occurs, we can safely pronounce against the presence of blood.

8. Roussel's aloin test, and Cowie's or Boas' modifications of Weber's guaiac test are reliable when used with stomach contents, but are often misleading with the feces.

9. Every man capable of making a urinary examination can, with care, gain valuable information from a test for occult blood applied to stomach contents and feces. The personal equation of the operator must, of course, be taken into consideration.

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DISCUSSION.

DR. HALSEY: I have been using this benzidin test. I tried to get some in town some time ago but failed, so Dr. Storck kindly gave me some of his. I can only confirm what Dr. Storck says about the value of this test. In its extreme delicacy one finds both advantages and disadvantages. If one suspects gastric or intestinal cancer, and no blood is detected by using this test in examining both stomach contents and feces, the presumption is very strongly against cancer. On the other hand, as the test reveals very small amounts of blood a positive finding of blood is of less grave significance than when some of the less delicate tests are used.

DR. SIMON: Dr. Storck has fully covered the chemical phases involved in the various tests for the detection of occult blood in the feces and gastric contents. I merely wish to say a word as to the practical application of these various tests. The benzidin test, as Dr. Storck has said is far the most sensitive, and it is because of its very high degree of sensitiveness that I prefer the aloin test for the gastric contents. This may seem paradoxical, but when we consider how easily the stomach mucous membrane may be made to bleed by the mere introduction of the stomach tube we can understand how easily a minute trace of blood can find its way into the expressed stomach contents. It is for this reason that a test too highly refined may often lead to false conclusions.

In the feces, however, this does not hold, and it is here where the benzidin test is of high value. One caution is highly necessary always in testing for occult blood in the feces. Meat of every variety should be absolutely excluded from the diet at least three days before applying the test. When this is done and the benzidin test is positive, we may be sure that blood is finding its way in the gastro-intestinal tract anywhere from the mouth to the anus.

DR. STORCK: Answering Dr. LeBeuf, I will say that if any bleeding is caused by the introduction of the stomach tube the reaction in the stomach contents or feces will show positive, as I have found that the ingestion of .5 grams of blood shows positive in the feces. As compared with the aloin or guaiac test the Adler's

benzidin test is about twenty time more sensitive; the aloin and guaiac tests react only in amounts $1/10,000$, while the benzidin test is sensitive in amounts $1/200,000$. The fact that the benzidin test is so very sensitive makes it extremely valuable as proving the absence of blood.

In reply to Dr. Jones: If I have any misgivings as to the length of time the feces have been retained, it is my practice to administer a saline, put the patient on an appropriate diet, and then make the test for blood.

N. O. Medical and Surgical Journal

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The A. M. A. Council on Pharmacy and Chemistry.

We sympathize fully and sincerely with the effort on the part of the organized association of the medical profession to remedy the evils of patent and proprietary medicines which are nostrums outright or indirectly. In fact, the JOURNAL for many years has taken this view of the matter in its entirety.

We, therefore, acknowledge the propriety of the resolutions adopted by the House of Delegates at the recent meeting of the American Medical Association and are in accord with the sentiment expressed, particularly in the second clause of those resolutions, which specifically expresses the belief "that the editors of many medical journals, official organs of State associations and privately owned journals are desirous of co-operating in the work of freeing the medical profession from the nostrum control." It is, however, going a little bit too far to condemn wholesale all preparations "which have not been approved by the Council", for, while the Council has accomplished thus far a great deal of good work, the list of preparations which need their attention for a favorable report, or otherwise, is not entirely exhausted.

The competition which the independent medical journal is compelled to endure in the open field with the *Journal of the American Medical Association* dictates often a policy more independent than the *Journal of the A. M. A.* could or would follow. It is a matter of fact that because of the gradually increasing scope of the A. M. A.'s official organ many independent journals have been forced to retire or to amalgamate with other journals in order to satisfy a natural demand for their existence.

The general education of the public is gradually solving the

question of the nostrum evil and the enforcement of the Pure Food Law is about to further accomplish this end.

The advertising in any medical journal must fulfill the essential object of catering to the readers of the journal with those things which they would seem to need or wish, and the more miscellaneous the advertising the more attractive this department becomes to the average reader of a medical journal.

Until the actual line is drawn between the proprietary preparations and the officinal formula, and until the average druggist becomes sufficiently educated to fill a composite prescription properly and palatably, it is going to be exceedingly difficult to educate the medical profession away from the use of composite remedies already prepared, even if these are fully under the ban.

We repeat that the spirit of the resolutions of the A. M. A. and the work of the Council on Pharmacy and Chemistry appeals to us and we feel that an effort to aid in the general movement in this direction should be made by everyone interested in the public health, morals, and the higher standard of the professions of both medicine and pharmacy.

The Report of Tuberculosis in New Orleans.

An earnest effort has been made by the New Orleans Board of Health to establish a record of the frequency and occurrence of tuberculosis. Not only has a rule of the Board been passed, but a city ordinance now covers this disease as among the communicable diseases which should be reported to the health authorities.

A recent circular from the Board makes an appeal to the physicians to aid in the worthy work. There is no intent to cause the victims of this disease any annoyance, but the objects aimed at are rather of sanitation with a view to protecting the household and community in which tuberculosis occurs, especially where death ensues. At this time no intelligent member of the medical profession can deny the general conclusion that the crusade against tuberculosis can only be made effective by their assistance, and especially in urging and in insisting upon sanitary measures in every household where the disease occurs.

The large percentage of deaths among consumptives and the high ratio of this disease compared with others in the mortality report of the city of New Orleans, urge the co-operation of the profession. Nearly one-third of the current deaths from all causes can be attributed to tuberculosis alone.

The Board of Health specifically charges that the public and the medical profession have for some time demanded action on the part of the health authorities which would tend to check the progress of this disease, and for the authorities to request in return for their effort that tubercular cases should be recorded is little to ask and little for the profession to give.

The organization of leagues, societies and lay bodies for the prevention of tuberculosis can accomplish little, no matter how great in numerical strength these may be, if the essential record of the disease is not made.

On many occasions the JOURNAL has argued the dangers of tuberculosis in the community, state and nation, and unless the profession of the city of New Orleans is willing to take a subsidiary position in the general movement in this matter a prompt and earnest effort must be made now to establish the relation of record with the Board of Health. This will certainly avoid radical measures which may become necessary if the profession remains apathetic.

Motives.

The annual output of college graduates and the commencement season always tend to occasion a profound reflection as to the philosophy of education generally, and particularly with reference to technical education.

The student serves his college ideals, his teachers, their methods and his own bent during his college years and steps forth into the world one of a miscellaneous lot, all bearing much the same mark so far as standard is concerned. The individual, however, soon separates himself from the host of his fellows and reaches out after distinction in whatever field he may have selected or which may have elected him.

Among the thousands of medical graduates each year a large per-

centage fails to qualify; others find that the practical side of the profession has fewer roseleaves than the inspiration of the student days has led him to expect, and, after a few years of trial, more medical graduates abandon the chosen profession and drift into various other occupations. Many a doctor has quit the Esculapian guild for the field of the Law, and not a few have found religious calling.

Of those who cling to the commercial promise, the hope of intrinsic reward, and to the endeavor of satisfied ideals, some arrive at the Temple of Fame, others stop at the foot of the hill and live in the shadows of unrequited promise.

As time goes on, the philosophers in the field of medical education recognize the shortcomings of method and stand out for higher standards in order that those who meet them may hope for a better, if not richer, reward, and the future of medical education promises not only greater ideals but fuller achievements and greater advance in the art and science of medicine.

The spirit of education is like the rest of Nature's plan in its lights and shadows, developing the best in those who are fit soil and burdening those who find only effort without solace, or reward in achievement, even finally accomplished.

In these days of bright sunshine and summer lassitude, the thought of the motives of education sifts into our intellectual atmosphere and makes us ponder over the burdens of humanity and their division in distribution among the toilers in many fields. When the days of effort come, we put our philosophy on the shelf and drift on with the balance of the moving crowd, more or less busy with our share of the endeavor which leads to a final reward.

Communication.

COVINGTON, LA., July 6, 1907.

To the Editors of THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL:

GENTLEMEN: In the July JOURNAL, recently issued, there appears on page 16 an article by Dr. E. M. Dupaquier, under title of

“My Experience as to the Recognition of Early Primary Cases and as to the Education of the Laity.”

Permit me space to express my admiration for the Doctor's moral courage and honesty in thus publicly acknowledging his inability to recognize as suspicious mild cases of yellow fever when unconnected with circumstances, pointing inferentially to their true nature.

Permit me also to assure him that my opinion, based on a rather extended and somewhat peculiar experience agrees with his conclusion that, the inability to recognize early and atypical cases is that of the whole medical profession, in New Orleans and elsewhere, and not his alone. Allow me, incidentally, to correct an impression derivable from his paper, though doubtless not intentionally expressed, that he reported suspicious cases on July 12, 1905. It was probably I who exclaimed, “why didn't you say so a month ago,” when he reported his observations to me (subsequently to the 12th of July). Suspicion was obtained on the afternoon of the 12th, but from a different source.

The shock was to me like that of an unexpected blow in the face, or the proverbial bolt out of a clear sky; and my recollection is very distinct as to the time and circumstances of its happening.

And, finally, permit me to submit, with the request that you publish some official correspondence, which indicates the attitude of one, and illustrates what may have been the predicament of other physicians, who saw in their practice the “early cases.”

The first document requires a few preliminary words in explanation.

Dr. Pothier, who (as a pathologist) is justly reputed expert in the diagnosis of yellow fever, visited me on Sunday, July 16, and imparted to me certain facts and surmises in connection with a district then under investigation for more than three days, *during which period written communications reached me as usual.*

The facts the Doctor imparted were, for the most part, already in my possession, and proper sanitary measures were already adopted to meet them. I had already interviewed at least one of the Doctor's *second* patients, and had already made a verbal report to my official superiors.

By an impulse, which I have not been able satisfactorily to

analyze, I asked the Doctor to kindly put in writing what he had just told me, and such additional facts as would help me. He did the next day (without date, save as vaguely indicated in the body of the communication).

DR. POTHIER'S FIRST LETTER.

Dr. Kohnke. My Dear Doctor:

The following information I gathered about what we were speaking of yesterday: Mrs. S. Vaccaro returned from Honduras on May 23, 1905. There was at that time no suspicious case in Belize or in that neighborhood. A few weeks later, exactly how many I could not obtain, quarantine was declared against Belize. On the 15th, 1905, of June, Mrs. Dantoni, Jr., returned from Sieba* on the ship Rosina, in company with thirty passengers, none of which were sick, and to all knowledge have been well up to now. There were no suspicious known cases at this time in Sieba.*

Opposite Mr. Vaccaro's place in the week of June 25, 1905, to July 2, 1905, first case took sick, and first case to die was on July 2, 1905, the father and two children, from information obtained. This family has moved from premises after the death, could not ascertain where.

Mr. V. took sick on June 28, 1905, discharged cured July 6, 1905; his daughter took sick on July 12, 1905, exactly two weeks after her father and is still sick.

The No. of Mr. Taormina's is 1132 Decatur. This morning I heard of a new case adjoining to the Vaccaro's place. He is said to be sick with a fever, and was taken home, could not ascertain his place of residence.

[Signed] O. L. POTHIER.

This report (not published by the receiver) was later made the basis of whispers, rumors and insinuations, which eventually reached me through my friends, who made inquiry and learned the truth; while through other channels, truth being not sought, falsehood was first magnified, then crystalized into accepted fact and industrially circulated—(But this is perhaps not the place for such digression.)

Dr. Nolte, of the State Board of Health, was quite positive in his impression that Dr. Pothier had said he reported to me in June

*Presumably Ceiba is meant.—Eds.

the presence of yellow fever. I thereupon wrote the following letter to Dr. Pothier:

AUGUST 25, 1905.

Dr. O. L. Pothier:

DEAR SIR: Dr. Nolte tells me that you told him you had informed me in June that suspicious cases of yellow fever existed in New Orleans.

I was surprised to hear him say this and told him that he must have misunderstood you, and that what you said was, probably, that you had mentioned to me your suspicion of the cases seen in June. This is quite different, and the difference is of tremendous importance.

I remember our conversation about the possible origin of the fever and your reference to the incidents occurring in June, but our conversation was in July, after the first report of suspicious cases. I understand that this incident has given rise to a suspicion that I was aware in June of the existence of yellow fever. I know, of course, that I had no inkling of it until the report of suspicious cases on the evening of July 12, and I suppose Nolte mistook you to say that you spoke to me in June.

I said for publication that I thought the fever existed as early as May. Perhaps this may become twisted into a semblance of an acknowledgment that I knew of its existence in May.

Yours,

[Signed.]

QUITMAN KOHNKE, M. D.,

Health Officer

(The twisting process was, in fact, actually applied, and the result advertised,—but this is another digression).

Five days afterwards the Doctor, somewhat irritated, apparently, mailed the following reply:

N. O., AUG. 30, 1905.

Dr. Quitman Kohnke, Health Officer:

DEAR SIR: I called at your office on July 12, 13, 14, 15 and 16, and each day asked Mr. Lanoz to let you know that I was very anxious to see you in reference to some important matter, asking that you would telephone me when I could see you, and it was not

until the Sunday, July 16, 1905, that I obtained an interview at about 1:30 p. m., on which day I reported two cases of yellow fever.

Very truly,

[Signed.]

O. L. POTHIER.

The interview referred to was the result of the only successful attempt of several to reach the Doctor by telephone.

(At the risk of being accused of too frequent digression, I may emphasize here the fact that, all of this neighborhood was repeatedly disinfected, the work beginning before the date of the Doctor's first communication). This is, however, not now in question. The matter under consideration is that Dr. Pothier either deliberately concealed yellow fever in 1905, or did not recognize it during his treatment of the disease. I prefer to believe the latter, and I say this not in derogation of Dr. Pothier's acknowledged ability, but to illustrate a condition affecting the whole profession, and to which Dr. Dupaquier has the moral courage to refer, using himself as an example.

It is the rule that epidemics begin with mild cases, and that the disease becomes more virulent as it progresses. This occurred in Ocean Springs, Miss., in 1897, and in 1899 in New Orleans, the second reported case was the fifth in a series of cases in the same house treated by the same physician. The situation in 1905 was different from the usual only in the accentuation of those conditions and factors making difficult the early recognition of the fever.

As our good old friend, Dr. Murray, of the Marine Hospital Service used to say: "The work of experts is made easier by 'side lights.'"

We should have more men like Murray and Dupaquier. It is only the incompetent and the guilty who are ashamed or afraid of the truth.

No doctor knows as much about yellow fever as some doctors think they do, and it should be consoling to our own ignorance to hear the honest confession of an able, modest, and truthful man.

Respectfully,

[Signed.]

QUITMAN KOHNKE,

Health Officer of New Orleans in 1905.

Miscellany.

Parisian Medical Gossip.

Translated by DR. T. C. MINOR, Cincinnati, O.

CONJUGAL HYGIENE AMONG THE HINDOOS—TREATMENT OF SYPHILIS IN THE TIME OF MOLIERE.—The "*Journal de Médecine de Paris*" gives an interesting excerpt on conjugal hygiene among the Hindoos.

Conjugal hygiene is dominated among the Hindoos by the fixed idea of procreation, for it is written in the sacred texts that man without male posterity cannot enter Paradise, and must likewise submit to humiliating metempsychosis. Marron declares "a man is only complete through his wife and his son," and that "by the prayers of his wife and son the father gains the celestial spheres." This is why the son, in Hindoo, is called *pouttra*, from "*pout*," that signifies Hell, and "*tra*," that means to save (to save from Hell). The purpose of sexual union being fecundity, the woman has a right to separate from her husband if he is sterile. The latter, on the other hand, may have a son by authorizing the connection of his wife with his brother or other male relative; the woman escaping from the charge of adultery by the following stratagem:

"By greasing with liquid butter, so that flesh does not touch the flesh, when the relative charged with the office approaches the woman during the night and a son is engendered to a woman without previous issue."

The Hindoos insist in writing on marriage that voluptuous sensation must not be considered the end of the sexual act, but as a mere accessory; it is, however, a necessary accessory, for in the Hindoo sense the sexual act deprived of voluptuousness is usually sterile. The Hindoos think the stronger the sensation of voluptuousness the more apt is the act to be fecund; this is why certain books of publicity, that Europeans regard as pornographical are considered by the natives as highly scientific and moral works. Valsiaya, in the 4th century of the Christian era, published the "*Kamashastram*" ("Science of Love"), and his pupil, Kokoga, afterwards wrote his *Kokogashastram*. These two authors have employed all the resources of imagination in combining the most voluptuous posings for a virtuous purpose. The Hindoos have

been most profoundly stupefied that certain editions of these works were seized, and even prohibited, by the French Government.

The "*Kamashastram*" and "*Kokogashastram*," together with similar works, say that perfect voluptuousness is only obtained when the woman is beautiful, the clothing elegant, jewels rich and rare. Then the woman's nourishment, too, is the tenderest betel nut, and when she is bathed in sweet perfumes; hence the many preys to the odor of flowers. The Hindoos marry very young, much before the time of puberty; but they cohabit only at the period of adolescence. Kokoga permits cohabitation from the 16th year for women and twenty years for men. Certain Hindoo authors show that cohabitation when very young fatigues youthful married couples, produces danger to maternity and debilitates the offspring. So he advises young husbands to not have sexual relations until they are twenty-one years of age.

It is recommended that the young couple occupy different beds so that the husband shall not absorb through his skin the sweat of the woman, as it is said to compromise the health of the male, but this advice goes unheeded for the most part in India. Young married people of all castes sleep side by side; it is only at the menstrual period they live apart, because the act at that time is considered impure, and the woman usually lives alone in her house. Children borne from connections during menstruation are claimed to be defective mentally in India. Conjugal relations, too, are only permitted on certain days, if we are to consider the geographical month; that is to say, the time that separates two consecutive menstruations; the first four days are impure, these are considered menstrual days. During the seventeen days following, with the exception of the eleventh and thirteenth days, sexual connection is allowable.

We see from the above under what conditions the Hindoos accomplish sexual relations with the view of fecundation. As in France, the Divinity is appealed to when children fail to come. The sterile women of India pray to their god Siva, the shrined god in the Hindoo trinity, the god of fecundity, whose emblem is the linguam, or phallus, often represented at street corners and in temples by a carved stone. There is in the south of India, at

Tanjora, a famous temple full of linguams, or carved penile images, three hundred and sixty-five in number, of all sizes, carefully arranged, one of which is worshipped each day of the year. These are greased with special oil and covered with flowers and perfumes, and the worshippers bow before them. Sterile women bring hither gift offerings and pass the night alone in the pagoda.

Kamin, who is a secondary god in Hindoo mythology, is also worshipped by sterile women. Kamin is a second Cupid armed with a sugar cane bow and seven candy arrows. These arrows are shaped like different flowers, jasmine, lotus, etc., and are symbolic of passion, desire, love. The husband and wife are advised to free themselves from all thoughts as far as possible and indulge in amorous embraces. Then the germ of fecundation is thought to gain most admirable qualities and a perfect infant results from such a union. Manott compares woman to "a field" and man to the seed. It explains the two elements of fruitfulness, i. e., the womb and virile liquid, if the two are equal the child will be superior; if the first is strongest the progeny is feminine. If the second predominates it will be masculine. In a general manner it is the paternal influence that is most intense, and the wise Manott remarks "The husband should feel within himself that it is he who is incarnate in the woman."

As soon as the sexual relation is accomplished the woman and man bathe and then take a refreshing sleep; on leaving the bath the woman must not look at her face in a mirror or in her husband's face.

These curious documents show how grand the act of coition is viewed by the Hindoos. It is considered an act of procreation and not mere sensuality, as in many civilized lands.

NON NOVEM SUB SOL.—The "*Journal de Médecine de Paris*" remarks, "In the present time when mercurial injections, soluble and insoluble, are in vogue, it is curious to note that as far back as the days of Molière one can dig up from a rare work now out of print, some observations published as far back as 1685 "On a true method of curing the Pox."

"It is true," says this work, "that when we consider the vile nature of such a malady, according to its primitive and ordinary origin and take it as a just punishment for an unfortunate sin

that alone sends a soul to Hell more than all other sins put together; that far from aiding one must add to the penalty of existing suffering by giving a greater penalty instead of an easy remedy."

We all recognize the morals of that epoch that commenced its cure of suffering man by still further punishment, where the whipping post was invariably the first remedy imposed, a revulsive method added to remorse.

"Nevertheless," our moralist continues, "experience shows us that one may sometimes contract contagion in an innocent and unavoidable manner. A pious woman may have a debauched and wicked husband; a child a criminal nurse with a syphilitic breast; people may contract the malady from using the same eating or drinking utensils of infected persons. Christian charity for these few reasons alone oblige us to give remedies for the glory of God and human charity."

Our author then announces such frightful mercurial remedies as red precipitate ointment along with the wonderful therias, with spirits of vitriol.

He also gives a *récipe* "for the cure of all varieties of pox recent or of ancient origin." He explains in some dozen pages—sufficiently at length to give a pharmacist neurasthenia, the peculiar method of treatment to follow. He remarks "To prepare a patient for our remedy, he must first of all be bled once or twice then purged two or three days thereafter. After all the immortal Molière invented nothing when he wrote his famous formula:

*Clysterium donare,
Poste seignare,
Deine purgare
Reseignare, repurgare et reclysterisare.*

This treatment was classical.

Here are some observations:

Soldier aged 28 years, symptoms of pox manifest, pustules on the body, entered hospital November 29, 1685.

He was bled on the 29th.

Bled again on December 1, the second time.

Took a purge.

On December 3 gave him 20 drops of our mercurial panacea. He vomited and purged several times.

December 4 took 10 grains of mercury.

December 5, 15 grains in morning and 15 grains at night.

December 6, took 20 grains of mercury in the morning and 10 at night.

December 7, 1685, took 25 grains in the morning.

December 8, 30 grains of mercury.

December 9, 35 grains of mercury.

The dose was increased after some days of repose, so he might be bled and repurged again. He was bled twice and took 448 grains of mercury in twenty-six days' treatment.

The patient was so well salivated that on December 24, 1685, he spit out out three pints of saliva and was radically cured of his pox. Would you prefer this ancient or modern treatment, taking the mercury by subcutaneous injections or by the mouth? The latter method of mercurialization is only a revival of the ancient treatment. You pay the money to the specialist and take your choice.

Louisiana State Medical Society Notes.

In Charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

MINUTES OF THE LOUISIANA STATE MEDICAL SOCIETY, TWENTY-EIGHTH ANNUAL SESSION.

NEW ORLEANS, May 14, 15, 16, 1907.

Meeting called to order at ten o'clock, President Henry Dickson Bruns in the chair.

The President then introduced Reverend E. W. Hunter, who offered the following invocation:

Our heavenly Father, we invoke Thy blessings on the Louisiana State Medical Society, and beg Thy guidance in their deliberations.

Thou, oh, God, art the supreme ruler of the universe, and the author and creator of mankind. We thank Thee, our heavenly Father, that this fact has never been denied by any of the race of mankind. Even among the pagans, we find the worship of Jupiter and Jove among the Romans and Greeks, an admission that behind all the forces and forms, over and above all, there is a Supreme Being upon whom all things must depend. In a mysterious and inscrutable way Thou hast seen fit to link divine wisdom with man's science. We do not know where man's work ends and thine begins, but we do know that man himself is but a reflection of Thyself, and that the wisest among the children of men, with all their wisdom, is as a spark from the glowing furnace of divine omniscience.

In this spirit the 28th Annual Meeting of the Louisiana State Medical Society desires to proceed in their deliberations. The opening of this convention with prayer is an admission of the supreme sovereignty of God. We therefore ask that Thou wilt bless the members of the Society in the prosecution of the business of their chosen profession; abundantly prosper them in their undertakings; help them in their scientific efforts, so that in endeavoring to discover the causes and cures of the ailments which afflict the human race they and Thou may be colaborers, to the honor and glory of Thy name, and the welfare of the children of men.

This we ask in the name of Jesus Christ. *Amen.*

THE PRESIDENT—Gentlemen, in opening this meeting, I do not care to say much, as I will have to speak often as the meeting progresses. I wish to say, however, that I will observe the rule limiting the reading of papers to twenty minutes, and the discussions to five minutes, strictly. It will not be my fault if we do not get through the program. We can get through our program if we limit the time strictly. I would suggest that we dispense with the supposed courtesy of extending the time for a man to get through, allowing him two or three times as much time as he should take. Of course, the chair should have the sense to see when a man is almost through, and should use discretion when there are but a few lines left.

DR. J. J. ARCHINARD delivered the address of welcome.

On motion of DR. OSCAR DOWLING the roll call was dispensed with.

On motion of DR. OSCAR DOWLING the minutes of the meeting of last year were adopted as published.

THE PRESIDENT then read his report. (*See NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, July, 1907, page 36.*)

DR. A. J. PERKINS, Third Vice-President, spoke as follows: I can only report progress in this way, that we have reorganized the Calcasieu Parish Medical Society, and there seems to be more enthusiasm than ever before, and we hope to keep organized at least twelve months longer.

DR. P. L. THIBAUT, Secretary, read the following:

ANNUAL REPORT OF SECRETARY.

NEW ORLEANS, May 14, 1907.

To the Officers and Members of the Louisiana State Medical Societys

GENTLEMEN: It is not the desire of your Secretary to bore you with the innumerable details which form part and parcel of the routine work of this office. We will endeavor to give you, in as few words as possible, an idea of what has been done during the year and what still remain to be done.

At our last annual meeting we reported forty parishes organized into thirty-seven parish societies. Of this number, three (Acadia, Caldwell and Jackson) have failed to pay their dues, up to the present writing, and must therefore be considered as delinquent. On the other hand, Calcasieu and Lafayette, which had long remained apathetic, have come forth with a strong membership. The number of organized parishes has therefore diminished by one, but we still entertain the hope that the three above-named will not allow themselves to be dropped from the roster of the Society. We have herewith attached a table showing the membership in each parish for the years 1906 and 1907. A comparison of the two years will show that although we have one parish Society less than last year, still, the paid-up membership is larger: Ten others (Concordia, Iberia, Pointe Coupee, Sabine, St. Martin, St. Mary, Terrebonne, Union and Washington) have enough physicians within their bord-

ers and should be organized. In this connection, we do not overlook the fact that in some instances at least the absence of concerted action is not due to the apathy of the resident physicians, but to the lack of facilities for transportation. The remaining seven (Cameron, East Carroll, Jefferson, Livingston, St. Bernard, St. Helena, West Carroll) cannot organize, because of an insufficient number of physicians.

At the last meeting a resolution of the Council to request of the Board of Administrators of the Tulane University of Louisiana that a member of the Louisiana State Medical Society be appointed on the Board of that Institution, was unanimously carried. Your Secretary was instructed to make known to the Board of Administrators the wishes of this Society. We are pleased to report that Dr. F. W. Parham, an honored member of this Society, is now on the Tulane Board.

We have made no change in our card index and vertical file system. In this connection, we wish to state that, with notable exceptions, we still find it very difficult to get certain necessary data from parish secretaries.

The stubs and vouchers, with other financial details, will be submitted to the expert accountant of the Society.

The Transactions of the 1906 Meeting have been published only in part in the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. The reason thereof is embodied in the report of the Committee on Publication. We wish to thank the editors of the JOURNAL, Drs. Chassaignac & Dyer, for their co-operation.

To the President, I extend my thanks for his staunch support.

Mr. George Augustin, the Assistant Secretary, has performed his duties well and faithfully.

You are all aware of the untiring zeal displayed by the Chairman of the Committee on Arrangement, Dr. John J. Archinard, in providing for your comfort. I leave you to his tender mercies.

In conclusion, I wish to thank the officers and members, individually and collectively, for having helped to make my task a pleasant one.

Respectfully submitted,

[Signed.]

P. L. THIBAUT, M. D., Secretary

APPENDIX TO SECRETARY'S REPORT.

	1906	1907		1906	1907
Acadia	13	..	Madison	1	1
Ascension	12	11	Morehouse	14	13
Assumption	8	7	Orleans	237	252
Avoyelle	29	26	Ouachita	6	10
Bienville	13	15	Plaquemines	5	6
Bi-Parish	12	12	Pointe Coupee.....	..	2
Bossier	14	14	Rapides	19	24
Caddo	42	40	Richland	6	3
Calcasieu	4	18	Sabine	1	1
Caldwell	7	..	St. Bernard.....	..	..
Cameron .....	..	..	St. Helena .....	..	..
Catahoula	4	6	St. James	17	15
Claiborne	14	10	St. John—St. Charles.	10	10
Concordia .....	..	..	St. Landry	16	23
DeD Soto	15	13	St. Martin .....	..	..
East Baton Rouge...	22	23	St. Mary .....	..	3
East Carroll	1	1	St. Tammany	11	11
Feliciana (E. & W.)	19	19	Tangipahoa	9	12
Franklin	10	8	Tensas	9	10
Grant	9	8	Terrebonne	1	3
Iberia	3	5	Union .....	..	..
Iberville	13	18	Vermilion	10	4
Jackson	8	2	Vernon	16	20
Jefferson	1	1	Washington .....	..	..
Lafayette	1	16	Webster	10	8
Lafourche	11	9	West Baton Rouge...	5	7
Lincoln	8	11	West Carroll .....	..	1
Livingston .....	..	1	Winn	8	6

DR. JULES LAZARD, the Treasurer, read the following reports:

ANNUAL REPORT OF TREASURER.

NEW ORLEANS, May 13, 1907.

To the Officers and Members of the Louisiana State Medical Society:

GENTLEMEN: In accordance with the By-Laws, the following report is submitted:

Balance transferred by preceding Treasurer..\$1,617.47

Dues collected 2,371.85 \$3,989.32

EXPENDITURES.

Salaries\$835.00

Rent 130.00

Return overpaid dues..... 8.00

Stationery and printing..... 216.01

Legislative and legal expenses..... 27.30

N. O Medical and Surgical Journal. 986.50

Exchange paid on checks 9.30

Sundry expenses 216.93

2,429.04

Balance on hand.....\$1,560.28

Before closing my report, it behooves me to direct the attention of the Society to its excess of expenditures over income. The individual expense of each member is \$3.25, a reduction of 9 per cent. over last year. This was the result of a very rigid economy and much cannot be hoped for in the direction of cutting down expenses.

The preceding Treasurer, for two years prior to the expiration of his term of office, suggested an increase in the annual dues, and for some poetical reason, the suggestion was disregarded.

The office of the Treasurer is to point to the necessity of a measure; it is for the Society to seek out and carry into effect the remedy.

Toward the end of last year, it almost became necessary for the Society to borrow money, such were the dire financial straits of this body. We may have beautifully written and erudite papers, but, gentlemen, you cannot run a Society without money. If you are *receiving* \$3.00 from a member, and are expending \$3.25, something must happen.

Respectfully submitted,
[Signed.] JULES LAZARD, M. D., Treasurer.

COMPONENT SOCIETIES IN GOOD STANDING.

NEW ORLEANS, May 13, 1907.

To the Officers and Members of the Louisiana State Medical Society:

GENTLEMEN: I take pleasure in reporting the following Societies as being in good standing:

Acadia, Ascension, Assumption, Avoyelles, Bienville, Bossier, Caddo (Shreveport Medical Society), Bi-Parish (Red River and Natchitoches), Calcasieu, Catahoula, Claiborne, De Soto, East Baton Rouge, Feliciana (East and West Feliciana), Franklin, Grant, Iberville, Lafayette, Lafourche, Lincoln, Morehouse, Orleans, Ouachita, Plaquemines, Rapides, Richland, St. James, St. John-St. Charles, St. Landry, St. Tammany, Tensas, Vermilion, Vernon, West Baton Rouge and Winn.

The clause in our By-Laws which provides that Parish Secretaries must remit dues thirty days in advance of the Annual Session, has helped to greatly facilitate the work of this office. A few societies, however, were derelict this year, and I trust that in the

future every Parish Secretary will strive to keep this provision of our By-Laws in view and remit within the allotted time.

Respectfully submitted,

[Signed.] JULES LAZARD, M. D., Treasurer.

DR. E. J. GRANER read the report of the COUNCIL, as follows:
To the President and Members of the La. State Medical Society.

GENTLEMEN—Beg leave to report that the Council is organized and ready for business.

We refer to the Society the letters of Dr. Fridge and ask for instructions in the matter.

In reference to the Medical Act, the report will be made by Dr. Chassaignac, who was chairman of Committee on Legislation.

The following report of expenditures showing the amount of money and how expended, out of \$300.00 allotted for the purpose, shows expenditure \$227.49, leaving a balance of \$72.51.

Respectfully submitted,

E. J. GRANER.

Chairman Council.

EXPENSES INCIDENTAL TO LEGISLATIVE COMMITTEE.

POSTAGE.

April 4.	Postage on Medical Act to Councillors.....	\$ 98	
April 6.	Postage for mailing Medical Act to every member of the State Society and ex-members, 1,000 at 4c.....	40 00	
April 24.	Mailing Medical Act to new members.....	1 88	
April 24.	Do., senators and representatives.....	6 28	
April 24.	Incidentals	1 75	
April 24.	Stamps	97	
			\$51 86
May 22.	Postage on Dr. Bruns' circular.....	\$ 9 10	
May 22.	Do., additional	1 58	
June 3.	Dr. Bruns' second circular.....	18 20	
			28 88
	Total postage		\$80 74

PRINTING.

AApril 6.	Searcy & Pfaff, Printers, for 2,000 copies Medical Act	\$20 00	
April 6.	Garcia Stationery Co. for 2,000 envelopes.....	4 75	
May 22.	J. G. Hauser, Printer, for printing envelopes.....	5 00	
May 22.	Garcia Stationery Co. for 500 envelopes.....	2 50	
May 22.	Searcy & Pfaff, 150 copies revised Medical Act.. ("rush work")	12 00	
May 22.	J. G. Hauser for 2,000 copies of Dr. Bruns' two circulars	27 50	
			91 75

INCIDENTALS.

April 4. Extra help for "rushing" mailing of Medical Act..... 5 00

\$177 49

ATTORNEY'S FEE.

E. T. Florance, for advice..... 50 00

Total\$227 49

(TO BE CONTINUED.)

Medical News Items.

THE REPORT OF THE DEPARTMENT OF HEALTH OF THE ISTHMIAN CANAL COMMISSION for the month of May, 1907, showed in about 39,003 employes a monthly average of morbidity 371.04 per thousand, and a death rate of 21.83 per thousand. Among the deaths, 71 in all, only six were from climatic diseases; these included only dysentery and malaria, although the climatic diseases listed embrace yellow fever, beriberi, smallpox, etc., as well. Among the general causes of death in the entire population pneumonia headed the list with 51 deaths, typhoid fever 18 deaths, malaria 17, accidental drowning 12, various types of tuberculosis 24, and of climatic diseases of unusual type it is pleasing to note that there were but three cases of beriberi and no yellow fever or other of the diseases formerly in vogue.

THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS met July 13 and organized with the following officers: President, Dr. F. M. Thornhill; Vice President, Dr. C. D. Simmons; Secretary and Treasurer, Dr. Felix A. Larue. Dr. J. G. Martin, of Lake Charles, La., is the newly appointed member of the Board in the stead of Dr. A. F. Barrow, whose term expired.

THE INTERSTATE MEDICAL JOURNAL, published in St. Louis, announces the purchase and absorption of the *St. Louis Courier of Medicine*. We regret to see the demise of the *St. Louis Courier of Medicine*, which has always been one of our valued exchanges, and we congratulate the first named journal on the material addition to its resources in the accomplished change.

THE HIPPOCRATEAN COLLEGE OF MEDICINE recently opened in St. Louis is a medical night school intended to meet the demand for such instruction. Similar institutions have been conducted for some time in Chicago and Philadelphia, the last with undoubted success. This venture is organized under incorporation with Dr. Joseph E. Chamberlain as President, and Dr. Albert H. Koch as Secretary; Dr. Emory Lanphear is the Dean.

THE INTERNATIONAL CONGRESS FOR HYGIENE AND DEMOGRAPHY, which is to meet in Berlin September 22-30, 1907, has issued a comprehensive announcement covering transportation and hotel facilities at reduced rates. The nine days to be consumed in the meeting are fully occupied with scientific and social features. Membership in the Congress may be obtained by sending the equivalent of 20 marks to the Secretary General, Dr. Nietner, No. 9 Eichhornstrasse, Berlin 9, W. Germany.

THE ASSUMPTION PARISH MEDICAL SOCIETY AT ITS JUNE MEETING had the following members present: Drs. W. E. Kittridge, T. B. Pugh, A. A. Aucoin, A. J. Himel, Bienvenu and Hy. A. LeBlanc. Minutes of previous meeting read and adopted. Dr. A. J. Himel read an excellent paper entitled "Some Minor Studies in Psychology, with Special Reference to Masturbation." A motion was adopted that the paper of Dr. Himel be sent to the N. O. MEDICAL AND SURGICAL JOURNAL for publication.

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH has adopted the following series of titles for its staff: Member, Associate Member, Associate, Assistant, Fellow and Scholar of the Rockefeller Institute, and has made announcement of a large list of appointments.

TEXAS RULES AGAINST TUBERCULOSIS. The health officer and State generally of Texas are interested in establishing regulations against the importation of tuberculosis. Since numerous points in the State have attracted the attention of health seekers the authorities have become alarmed at the great number of consumptives traveling into the State. As yet no legislative act has been passed, but this seems to be on the way.

THE TEXAS MEDICAL JOURNAL HAS COMPLETED its 22d volume,

and the Editor, Dr. F. E. Daniel, says "It's still independent in all things". This is the spirit that makes good journals.

THE FIRST INSANE ASYLUM OF TEXAS was built at Austin in 1861 and had 50 patients. Now Texas has four asylums and 4,500 inmates, and 500 insane people in the jails.

TEXAS QUARANTINE CHANGES. Dr. J. H. Florence, State Quarantine Inspector at Sabine Pass, has been transferred to Galveston, to take charge of that more important station, relieving Dr. J. P. Tucker, resigned. Dr. Florence's successor at Sabine Pass is Dr. F. C. Ford, of Houston.

A BILL TO PLACE AN OSTEOPATH on the Illinois State Board of Health failed of passage at the last session of the Legislature, just closed.

REMOVAL OF DAIRIES. The City Board of Health has finally removed all dairies from within the city limits.

PERSONALS. Among the visitors to New Orleans last month was Dr. A. A. Ayo, of Thibodaux, La.

Dr. J. T. Halsey is summering at Kennebunkport, Maine.

Dr. J. A. Storeck, of this city, will spend his vacation in Boston.

Dr. W. W. Butterworth is in Boston doing special work.

REMOVALS. Dr. W. B. Pierce has moved from Lake Providence, La., to Shreveport, to practice.—Dr. E. W. Gill has changed his location from Gueydan to Eunice, La.—Dr. E. Paxton is at Aberdeen, Miss., having moved there from Corinth.

DEATHS. On June 23, 1907, at Arcadia, La., Dr. T. H. Pennington, after practicing medicine for fifty years.

Dr. Alphonse Deseay died on July 17, 1907, at Ruston, La., at the age of 54 years. The doctor was a graduate of Tulane.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

Modern Medicine. By eminent American and foreign authors, edited by WILLIAM OSLER, M. D., etc. In seven octavo volumes of about 900 pages each. Illustrated. Lea Brothers & Co., Philadelphia.

In writing this review it is difficult to restrain our enthusiasm and moderation in the expression of our feelings is consented to only by force of cold reason and *étiquette*. Let us write about it plainly.

First of all, that which strikes us is the stamp of originality in the features of this work as a text-book, and this sensation alone makes it attractive. Then, when we go into the detailed consideration of each chapter of Volume I, in addition to that original stamp, we find a delight in reading the presentation of each subject, and the impress of delight is marked indelibly by the feeling that something useful remains.

The introduction, whose subject is the "Evolution of Internal Medicine", written by Osler himself, in his usual lively style, will throw a searching light upon the desiderata of the Teaching of Medicine, in order that Practical Medicine may become more and more useful and profitable to both the public and the practitioner. It is comforting to feel that the book which will certainly have access to the remotest corners of the land is carrying such broad ideas, so essentially founded on truth and wisdom. We all know how right and true Osler is when he writes of the crying reforms needed in our hospital systems, and there is the basis to improve medical education: "*The well equipped medical clinic is the most urgent need of the profession.*" Scattered broadcast, such appeal and persuasion as those Osler's teaching carry will help a universal entente in the profession towards bringing about the needed reforms. Individual preferment shall not impede the march onward. Well equipped men as teachers should devote their energies to hospital work, and the practising body would know where to go on, once a year, to drink knowledge afresh.

This work is designed to be helpful to practitioners. Clear statements are given without unnecessary references to literature. Authorities on each subject have been selected, and adequate practical treatment of each scientific subject is aimed at. Most recent information is presented, such as the rôle of Protozoa as causes of diseases, and also as such the rôle of the "gastronomic follies of the public" (section on metabolism). Attention is directed to the presentation of the subject of auto-intoxication by Dr. Taylor, and the own words of Osler are inspiring. "While much remains to be done, we have enough positive knowledge to enable us to approach the clinical side of the question in an intelligent manner, unburdened from much of the nonsense of the auto-intoxication propaganda of the past twenty years."

We would not consider this review a waste of time and paper if only we could impress the reader with the fact that the work was conceived and brought forth with love and spirit, and that it can not fail to communicate some of its life to waning efforts in mastering our art. Be like the great Italian painter who, upon seeing beautiful paintings, grew so enthusiastic as to cry out at once: "I, too, am a painter," and he proved it. Be not only well informed, but be enthusiastic over our Art, even as you grow old. A great medical work like *Modern Medicine* will take away the chill of your routine work, and the love of it will make you comfortable as you become more able to face its absorbing problems in daily practice.

E. M. D.

Surgery, Its Principles and Practice. By Various Authors. Edited by W. W. KEEN, M. D., LL. D. W. B. Saunders & Co., Philadelphia.

The first volume of this work, on History, Surgical Physiology; Surgical Pathology; Infectious Tuberculosis, Tumors, Wounds, etc., is certainly a most flattering announcement for the volumes to come. A glance at the names of the contributors is an evidence of what is to be expected, and an assurance that this great undertaking should realize all expectations. A view of the first volume, dealing with the most interesting pathological conditions in surgery, containing the latest facts and theories, is written in the most comprehensive style and beautifully illustrated.

The opening chapter, a narrative of surgery, furnishes most interesting reading, giving a historical sketch of the progress of surgery from the great Hippocrates, nearly 500 years B. C. to the present day; showing the slow but gradual improvement in surgery until the discovery of anesthesia by Morton in 1845, when it took a sudden leap forward, until the promulgation of the germ theory by Lister in 1867, when the foundation was laid for the great work of the modern surgeons, showing how theories are supplanted by facts and the study of surgical pathology is fast giving us a certain science that is annually saving thousands from the grave. Surgical physiology, an innovation in works of this kind, is a great addition to the book. Attention is especially called to the heart's action and its management in collapse, the proper mode of stimulation and the dangers of some of the routine practices adopted in many of our institutions. The importance of studying blood pressure, the character of the pulse in infectious diseases, and its great importance as a diagnostic factor, as well as the effect of respiration on the circulatory system.

The chapter on blood covers the field thoroughly and shows conclusively its value and importance in surgical diagnosis. It is particularly notable that in each succeeding chapter every pathological subject is thoroughly discussed and the latest and most approved treatment given. The Bier method of hyperemia, which has undoubtedly added another most valuable therapeutic agent to surgery, is described.

The chapter on shock, a question of so much importance to the surgeon to-day, is written by no less an authority than Geo. W. Crile, whose experimental work on this subject is too well known to need comment. The time spent in reviewing this book has been most profitable. It is a great work and must become popular. When complete it will form a surgical library in itself and will be of especial value to the general practitioner, who wishes to inform himself on modern surgery and has not the advantages of a large library. Dr. Keen has done himself honor and the profession a great good, for which his collaborators have just cause to be proud.

MARTIN.

Self-Propelled Vehicles. A Practical Treatise on all Forms of Automobiles. By JAMES E. HOMANS, A. M. Theo. Audel & Co., New York, 1907.

It struck me at first as rather odd that a book on Self-Propelled Vehicles should interest medical men. But a review of its contents soon convinced me of its great value to any physician owning and running an automobile, more especially if living at a distance from repair shops. The book is of only interesting reading and most instructive, but contains a clear and comprehensive description of all parts of an automobile, their mechanism and use, the method of adjusting and replacing parts, and the importance and best means of preserving them. In medical parlance, it gives the anatomy, physiology, diagnosis, pathology and treatment of the automobile, and I am convinced will prove not only valuable to any automobilist, but will teach him a few facts which will save his temper and enable him to get better results with his machine.

MARTIN.

Text-Book of Anatomy for Nurses. By DR. ELIZABETH R. BUNDY. P. Blakiston's Son & Co., Philadelphia.

Any one who has taught nurses knows the difficulty often encountered in adapting the subject to their requirements. Two physicians teaching the same branches would vary materially in their ideas of what might be of the most importance. This would apply especially to anatomy. Dr. Bundy, who has had an experience as Superintendent of the Connecticut Training School for Nurses, was evidently impressed with this fact and deserves much credit for the book just published, as she has succeeded in compiling an anatomy containing all the essential facts on the subject. The style is very simple and clear, the translation of the Latin names is given and the cuts are good. It is a book that should recommend itself to those teaching anatomy to nurses as well as to the nurses themselves. The edition is prettily illustrated and neatly bound in cloth.

MARTIN.

Plaster of Paris and How To Use It. By MORTON W. WARE, M. D. New York Surgery Publishing Co., New York.

The subject of plaster of paris is becoming more important as we become more familiar with its use. There is scarcely a fracture to which it cannot be applied, and nothing is superior for immobilizing joints. It is not in general use to-day, because those with a limited experience are apt to get poor results. This is due not to the plaster, but often to the use of an inferior quality and lack of experience in its application. This little book covers the subject thoroughly from the making of the bandage to its application in any form of splint, cast or dressing. The text is clear and the illustrations good. The book is neatly bound and sells for \$1.00 only.

MARTIN.

Cancer of the Rectum. By HARRISON CRIPPS, F. R. C. C. J. & A. Churchill, London; P. Blakiston's Son & Co., Philadelphia, 1907.

In 1876 Mr. Cripps won the Jacksonian Prize for his essay on the Treatment of Rectal Cancer. He afterwards enlarged the scope of the essay and it appeared as the first edition of this work in 1879. This is the fifth edition which has been largely rewritten, and to which the author has added a table of 380 consecutive cases occurring in his private practice.

The work is divided in nine chapters, as follows: I. Anatomy of the rectum and function of the mucous membrane. II. Etiology. III. Pathology. IV. Symptoms. V. Differential diagnosis. VI. Excision.

VII. Colotomy. VIII. Palliative treatment. IX. Illustrative cases and tables including 380 cases.

There are 13 plates of several figures each devoted to the histology and pathological anatomy of the subject, drawn by Mr. Cripps himself, which alone are worth more than the price of the book, as they are artistic as well as instructive.

Mr. Cripps, of course, favours excision when practicable, deeming, however, that only about 30% of the cases presenting themselves are suitable, and that of those selected cases about 37% get well, that is, remain free from recurrence for three years. Colotomy, he believes, is indicated when excision does not promise complete removal, and he urges that it be done early in order to relieve pain, avoid the effects of obstruction, and retard the growth of the cancer.

When neither operation is advisable, he thinks much can be done to palliate by means of local treating, including the use of a Volkmann's spoon.

The book is a splendid specimen of the maker's art, the type being clear and large; the paper, fine; the binding, strong and neat.

All in all it is a most satisfactory work and one to be heartily recommended to all practitioners, to those who have the duty of diagnosing the diseases as well as to those who have the opportunity of treating it.

C. C.

An Epitome of Diseases of the Nose and throat. By J. B. FERGUSON, M. D. Lea Brothers & Co., Philadelphia and New York.

As the title indicates, this is a brief compendium of nose and throat diseases, too brief in its subject to be of any great value except to medical students who wish to refresh overcrowded memories at examination time or for the general practitioner desirous of gaining some aid in the diagnosis and treatment of such affections. The important points are covered by questions after the consideration of each organ and its diseases, and these serve to emphasize the necessity of studying the subjects more thoroughly. The author has designed the book more as a guide to the study of rhinology and laryngology than as a text-book, and as such it is well gotten up.

DeR. & K.

Woman in Girlhood, Wifehood, Motherhood, &c. By MYER-SOLIS COHEN, A. B., M. D. John C. Winston Co., Philadelphia, Chicago, Toronto.

This work is written for the young mother especially, but carries enough of practical advice to make it useful for all women. The text is plainly written so as to be within the understanding of the average reader, and the illustrations are clear enough to explain the text. An excellent glossary is appended, and this adds to the value of the book.

DYER.

Syllabus of Lectures on Human Embryology With a Glossary of Embryological Terms. By WALTER PORTER MANTON, M. D. Third Edition. F. A. Davis Co., Philadelphia.

In the preface of this little handbook the author states that the object of this syllabus is to furnish to students of medicine and practitioners an outline of the principal facts in human embryology, and in this he has succeeded excellently. The illustrations are for the most part clear drawings which are highly explanatory, and the text is both concise and comprehensive. The character of the text is such as to forbid an extensive review without making it wholesale, but it should suffice to say that the perusal undoubtedly proves the purpose of the prefatory announcement.

DYER.

Studies in the Psychology of Sex. Erotic Symbolism; The Mechanism of Detumescence; The Psychic State in Pregnancy. By HAVELOCK ELLIS, M. D. F. A. Davis Co., Philadelphia.

Mr. Havelock Ellis during several years past has opened up the study of the field of sex evolution and its psychology. At first a narrow-minded public misinterpreted the intentions of this writer, but to-day he stands as the student and exponent of this field. His studies in the evolution of sex, in perversion and in the purpose of the human race have made many changes in the opinion of even scientific men.

The text at present under review covers the field of symbolic fetishism as related to the two sexes, and takes up also the morbid side of such. It explains much of the development of sex relation and stops only at the extraordinary psychic depravities which are associate. The book necessarily is intended for the professional mind and should be read with profit both by the man of law and of medicine. DYER.

Psychology Applied to Medicine; Introductory Studies. By DAVID W. WELLS, M. D. F. A. Davis Co., Philadelphia.

It is only within recent years that psychology has become a practical subject of instruction in advanced medical schools and in leading institutions of learning. The work under review is intended as an argument for the reader to correlate psychology and medicine; in other words, to associate what might be called the spiritual in the individual with the material and physical. The subject is radically presented and begins with the study of the higher functions of the brain as expressed in reason and instinct. It handles the phases of the subjective mind as expressed in dreams, imagination and suggestion. Hypnotism finds large space, and animal magnetism is discussed scientifically. The work is not pretentious, but is justified in filling an adjunct place in the field of psychic medicine. DYER.

A Compend on Bacteriology, Including Animal Parasites. By ROBERT L. PITFIELD, M. D. P. Blakiston's Son & Co., Philadelphia.

This text is one of the well known Blakiston's Quiz Compends, and covers the ground as other texts of this type. It possesses the advantage of being brought down to the present time, and contains a very clear presentation of the phagocytic theory, immunization, opsonins, &c. The illustrations are excellent and particular care has been taken with the presentation in picture plates of the various organisms common and foreign to the human frame. DYER.

Text-Book of Psychiatry. A Psychological Study of Insanity for Practitioners and Students. By DR. E. MENDEL. Authorized Translation. Edited and enlarged by WILLIAM C. KRAUSS, M. D. F. A. Davis Company, Philadelphia.

The translation of Mendel's work on psychiatry places at the disposal of students not familiar with German one of the best of the smaller text-books. While not accepting Kræpelin's views as to classification, that used is clear and easily understood. The descriptions of the various psychoses leave little to be desired. No better introduction to the study of mental disorders could be placed in the hands of the student.

Paraffin in Surgery. By WILLIAM H. LUCKETT, B. S., M. D., and FRANK I. HORN, M. D. Surgery Publishing Co., New York, 1907.

To one particularly interested this little work, attractively bound, will

prove of great value. The history of the method, American in origin, is faithfully related.

The details of technic are clearly enunciated, enabling the specially apt to master that art possessed by few, namely, cosmetic surgery.

LARUE.

B. N. A. or Anatomical Nomenclature. By LEWELLYS F. BARKER, M. D. P. Blakiston's Son & Co., Philadelphia, 1907.

The abbreviation B. N. A. refers to the anatomical nomenclature adopted at Basle over 10 years ago by the Anatomical Society.

This concise work unifies the complex system in vogue of anatomical names, of which there are so many synonyms.

This important contribution to the study of anatomy will appeal to students and teachers.

This system has been adopted by authors in the allied sciences of Histology, Embryology, Zoology, etc.

LARUE.

Tumours, Innocent and Malignant. By J. BLAND-SUTTON, F. R. C. S. W. T. Keener & Co., Chicago, 1907.

Of all the medical books the reviewer has perused none has furnished more food for thought than Bland-Sutton's up-to-date exposé of the subject of tumors.

No more instructive reading can be found in medical literature, for in every stroke of the pen you can recognize the stamp of authority.

We not only recommend, but urge our confrères, who all feel the great importance of this subject, to procure this inestimable work on that terrible scourge—cancer.

Add to this a good binding, fine paper and clear print—other desiderata.

LARUE.

Manual of Obstetrics. By A. F. A. KING, A. M., M. D., LL. D. Tenth Edition, revised and enlarged. Lea Bros. & Co., Philadelphia and New York, 1907.

So many editions of this well known manual have been read and accepted by the profession that no introduction seems necessary. It has gradually grown from a small handbook, intended simply as an outline of the rudiments and essentials of obstetrics, until the practitioner finds it a condensed, handy volume covering quite satisfactorily the scope of practical obstetrics.

Since the last edition (1903) the work has been extensively revised, many parts entirely rewritten, and forty new engravings have been added.

MILLER.

The Practice of Obstetrics, by American authors, edited by REUBEN PETERSON, M. D. Illustrated. Lea Bros. & Co., Philadelphia and New York.

This is one of the volumes of the Practitioners' Library, issued by Lea Bros., and is the work of ten well known American authors.

The arrangement of the text is simple and each contributor has been allowed sufficient latitude to develop his subject in accordance with his experience, but of course a plan had to be closely followed to ensure uniformity and completeness of chapters. There has always been a serious objection to multiple authorship. Such works often lack cohesiveness and in the division of labor, details are often omitted that are quite necessary in a text-book. This objection does not apply however, to this book. Repetition has been assiduously avoided, and it is to the credit of Dr.

Peterson so that few instances of encroachment upon another author's territory is to be noted.

One of the first features noted is that not all of the contributors are obstetricians.

The chapter on the Development of the Ovum has been written by Dr. Carl Huber, Professor of Embryology in the University of Michigan and the chapters covering Pathology of the Placenta, Membranes and Fetus, by Dr. Scott Warthin, Professor of Pathology in the same university.

It is impossible to do more than call attention to details in a short book notice, but some chapters should receive special mention.

Dr. Warthin's description of the pathological conditions of the placenta is decidedly the best to be found in the modern text-books. The author has evidently made an exhaustive personal study of placental syphilis and placental tuberculosis, and this portion of the work is of exceeding value.

Another chapter entitled to mention is that of the Pathology of the Puerperium, written by Dr. Foster Lewis.

Obstetrics is a subject which can be peculiarly well displayed by illustrations, and Dr. Peterson seems to have had unusual facilities for obtaining photographs and specimens. The illustrations are beautifully executed and are in keeping with the rest of the work for which the publisher is responsible.

MILLER.

Publications Received.

LEA BROS. & CO., Philadelphia and New York, 1907.

Lea's Series of Pocket Text-Books. Materia Medica, Therapeutics, Pharmacology and Pharmacognosy, by William Schleif, Ph. G., M. D. Series Edited by B. B. Gallaudet, M. D. Third Edition, Revised and Enlarged.

A Text-Book of Practical Therapeutics, by Hobart Amory Hare, M. D. 12th Edition.

Progressive Medicine. Hare-Landis. Vol. IX, No. 2, June 1, 1907.

The Practice of Obstetrics, by American Authors. Edited by Charles Jewett, M. D., 3rd Edition.

Modern Medicine, by Wm. Osler, assisted by Thos. McCrae, M. D., Vol. 11, *Infectious Diseases*.

P. BLAKISTON'S SON & COMPANY, Philadelphia, 1907.

Postoperative Treatment, by Nathan Clark Morse, M. D., 2nd Edition. *Lateral Curvature of the Spine and Round Shoulders*, by Robert W. Lorett, M. D.

Practical Gynecology, by T. E. Montgomery, M. D., 3rd Edition, Revised.

J. B. LIPPINCOTT CO., Philadelphia and London, 1907.

International Clinics, Vol II, 17th Series.

D. APPLETON & CO., New York and London, 1907.

The Principles and Practice of Dermatology, by W. A. Pusey, M. D.

G. P. PUTNAM'S SONS, New York and London, 1907.

Diagnosis of Organic Nervous Diseases, by Christian A. Herter, M. D., Revised and Enlarged by L. Pierce Clark, M. D.

MISCELLANEOUS.

Bulletin of the Louisiana Geological Survey, No. 4,

Diseases of the Rectum and Intestines, by W. C. Brinkerhoff, M. D., (Orban Publishing Co., Chicago, 1907.)

The Efficient Life, by Luther H. Gulick, M. D. Doubleday, Page & Co., New York, 1907.

The Thirty-seventh Report of the Central Free Dispensary of West Chicago at Rush Medical College for the Period of Four Years, Extending from Jan. 1, 1903, to Dec. 31, 1906, with Charter and By-Laws.

Around Africa via Lisbon: A Medical Tour, by Nicholas Senn, M. D.

Reprints.

The Physiological effect of the Waters of the Hot Springs of Arkansas, by E. H. Martin, M. D.

Combination of the English and French Obstetric Locks, for the Prevention of Dangerous Compression of the Fetal Head by Forceps, by A. Ernest Gallant, M. D.

Hydrotherapeutic Prescriptions, by Thos. H. Pratt, M. D.

The Climate of Southern Maine In The Treatment of the Later Stages of Hypertonia Vasorum, by Dr. L. F. Bishop.

Use and Effect of Gallic Acid in the Treatment of Consumption, by Wm. H. Hutt, M. D.

The Cure of Consumption with Subcutaneous Injections of Oils, by Thos. B. Keyes, M. D.

The Overtreatment of Syphilis; (2) Diet as a Therapeutic Measure in Diseases of the Skin, by George Henry Fox, A. M., M. D.

Clinical and Pharmacological Report on Validol, by A. G. Cipriani, M. D.

The Treatment of Coryza; (2) Obstetrics; (3) Obstetrics and Gynecology; (4) Gynecology, by Dr. E. S. McKee.

Fernand Henrotin, A Commemorative Address; (2) Tendon Tissue vs. Catgut, by Dr. Nicholas Senn.

The True Ground for State Regulation of the Healing Art, by Dr. Kenneth W. Millican.

The Examination of the Heart, by Sir Wm. H. Broadbent.

What Can the Organized Medical Profession Do To Aid in the Suppression of Quackery, by Dr. Henry W. Cattell.

A Review of the Opsonins and Bacterial Vaccines, by E. M. Houghton, M. D., and *Directions for Determining the Opsonic Index of the Blood*, by E. C. L. Miller, M. D.

Evisceration of an Eyeball by a Single Mass of Heated Metal; (2) A Study of the Nativity, Sex and Age, Occupation, and Social Condition of 3,436 Cases of Senile Cataract Operated Upon at the Wills Hospital in Philadelphia, by Dr. Charles A. Oliver.

The Gross Appearance of the Tissues of the Iris in Epilepsy, by Drs. Chas. A. Oliver and Jay C. Knipe.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR JUNE, 1907.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	9	10	19
Intermittent Fever (Malarial Cachexia)	1	2	3
Smallpox.....		1	1
Measles	2	1	3
Scarlet Fever.....			
Whooping Cough.....	3	1	4
Diphtheria and Croup.....	2	1	3
Influenza.....			
Cholera Nostras.....			
Pyemia and Septicemia		2	2
Tuberculosis.....	56	47	103
Cancer.....	20	4	24
Rheumatism and Gout	1		1
Diabetes	2		2
Alcoholism	7	1	8
Encephalitis and Meningitis.....	16	6	22
Locomotor Ataxia.....	1		1
Congestion, Hemorrhage and Softening of Brain.....	24	12	36
Paralysis	3	1	4
Convulsions of Infants	2	4	6
Other Diseases of Infancy	32	20	52
Tetanus.....	1	2	3
Other Nervous Diseases			
Heart Diseases	35	24	59
Bronchitis	4	8	12
Pneumonia and Broncho-Pneumonia.....	16	18	34
Other Respiratory Diseases	4	1	5
Ulcer of Stomach.....			
Other Diseases of the Stomach	5		5
Diarrhea, Dysentery and Enteritis.....	68	34	102
Hernia, Intestinal Obstruction.....		2	2
Cirrhosis of Liver.....	3	1	4
Other Diseases of the Liver	3	1	4
Simple Peritonitis		2	2
Appendicitis.....	1	1	2
Bright's Disease	20	15	35
Other Genito-Urinary Diseases.....	2	1	3
Puerperal Diseases	1	1	2
Senile Debility	11	8	19
Suicide	5		5
Injuries.....	25	8	33
All Other Causes.....	20	22	42
TOTAL.....	405	262	667

Still-born Children—White, 17; colored, 22; total, 39.

Population of City (estimated)—White, 251,000; colored, 90,000; total, 341,000.

Death Rate per 1000 per annum for Month—White, 19.36; colored, 34.93; total, 23.47.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 29.96
Mean temperature 80.
Total precipitation 0.98 inches.
Prevailing direction of wind, south.

*Paullum sepulchre distat inertia
Celata virtus. — HORACE.*

New Orleans Medical and Surgical

Journal.

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MELLIER DRUG COMPANY, 2112 LOCUST STREET, ST. LOUIS

New Orleans Medical and Surgical Journal.

VOL. LX.

SEPTEMBER, 1907.

No. 3

Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a WRITTEN order for the same accompany the paper.)

Round Ligament Suspension For Retrodisplacements of the Uterus.

By C. JEFF MILLER, M. D., New Orleans, La.

An effort is still being made to improve the operative treatment of retrodisplacements of the uterus, especially that class in which it becomes necessary to open the abdomen. I shall limit my remarks chiefly to a resume of the present tendencies in operative treatment. Surgeons are not yet of one mind as to the best surgical technic, even for the majority of cases. Probably this is due in a measure to the diversity of opinions held as to the symptoms and influences of retrodisplacements.

As a general proposition and also to place the subject in a practical form for discussion, it must be first understood that displace-

nents, *per se*, do not give rise to sufficient symptoms to demand treatment. The symptoms for which the patient seeks relief are invariably the result of complications existing in the pelvis.

The commonest group of symptoms, viz. sense of weight, pelvic discomfort, bearing down, back ache and distress after exercise, are almost invariably attributed to congestion following interference to the circulation from twisting of the vessels. That such influences cannot be the origin of all these phenomena is plain to any one who makes a careful study of the uterine blood supply. No other organ has a more abundant collateral circulation, or, is better prepared for the contingencies of disturbed position than the uterus and appendages.

Shultze, Schroeder, Montgomery and others, have reported series of cases examined who gave no symptoms of pelvic trouble, and and one observer (Schroeder) found that 28.71 percent showed retrodisplacements.

Such findings naturally lead up to the most important feature of the treatment—diagnosis.

Diagnosis does not consist of simply recognizing a deviation of the axis usually assumed by the uterus. It means careful elimination of numerous complications arising in the uterine and appendageal structures, bladder, kidney, and bowel diseases, constitutional conditions and even embryological anomalies.

Ptosis of the abdominal viscera is rapidly becoming better understood. It is no longer known as an affection peculiar to any single organ and just how much this peculiar state may involve the pelvic organs has not yet been fully investigated.

The backache attending tabes, constitutional weakness, hysterical stigmata and urethral affections, all come up for elimination when the exciting cause of pelvic distress is being sought.

The complications usually found and easiest to recognize are the conditions resulting from infection, viz. endometritis, chronic metritis, tubal disease, and pelvic peritonitis.

The influences upon the position of the uterus of injuries occurring during parturition are too well recognized to need more than a mention, for any operation, or combination of operations for dis-

placement must necessarily include a repair of injuries of the pelvic structures.

I take it for granted that it will be admitted that pessaries have a field of usefulness, that Alexander's operation with its numerous modifications will give entire satisfaction in another type of cases and that another list will be just as satisfactorily relieved by vaginal operations. It is not proposed to discuss the relative merits of all these procedures.

My idea is to simply report my experience in a series of cases in which displacement was corrected by suspension of the uterus on the round ligaments.

During the past five years there has been a gradual unraveling of the tangled facts and fancies underlying operations for displacements. The desire to improve on Nature by making new ligaments, or fixing the uterus by producing adhesions in various ways has given way to the idea that the ligaments originally intended for supports should be utilized. We hear less of ventro-suspension and fixation and more of the various technics devised for utilizing the round ligaments.

There has always been a feeling that ventro-suspension was not an ideal operation and would finally be supplanted by something better; some operation not dependent upon a free suspensory ligaments.

The uterus is drawn upward to an unnatural level and often abnormally anteфлекed, the surgeon is never certain whether the result will be a suspension, or firm fixation, and a band of cicatricial tissue which may remain firm or become attenuated to any degree is the sole dependence for success.

This band of adhesion, having no function in common with the uterus, is incapable of the changes incident upon pregnancy and involution.

Holden relates in his review of the suspension operations at John Hopkins Hospital, that the most frequent adverse symptom during pregnancy was abdominal pain. This discomfort may be so great as to become a serious complication, or if fixation has occurred instead of suspension, uniform enlargement of the preg-

nant uterus is not possible and thinning of the posterior uterine wall takes place with its numerous dangers such as dystocia, rupture of the uterus, and malpositions of the fetus.

Then, too, it cannot be denied that the percentage of recurrence will be larger after uterine suspension than after round ligament suspension. Holden states that if pregnancy does not intervene the percentage of recurrences is not more than five percent. A most serious charge is that of Edgar, who states that over eleven percent of pregnancies in a larger series of cases were dystocic.

Since adopting my present technic I have suspended the uterus on the round ligaments in 96 cases, performing at the same time various operations indicated upon the uterus and adnexa. This does not represent my entire experience for during the same period other methods were employed until I was satisfied of the advantages of round ligament suspension. The method first employed (Gilliam's) was not used in consecutive cases when the appendages were removed. Lately the method was extended with modifications to practically all cases, with entirely satisfactory results.

It is not necessary to report the cases in detail. There were no deaths in the series.

As far as practicable I have endeavored to keep in communication with these patients but in hospital cases and others living out of New Orleans it has been impossible.

I have reexamined at various times the majority of them, however, and have not found a single instance of recurrence of the displacement.

In the beginning of my work I employed the technic originally described by Gilliam, who draws a loop of the round ligaments through the abdominal wall and fastens them upon the surface of the aponeurosis. There seemed to be only one or two objections raised to this technic.

1st. That the anterior parietal space is so divided by these loops that a coil of intestine might easily slip through and become strangulated.

2nd. That the whole abdominal wall was pierced, excepting the skin, and added the liability of hernia.

3rd. In some cases the ligament is too large and firm to be doubled and pulled into the new groove.

Gilliam's method has been modified by various surgeons until today it is unqualifiedly the best operation in all cases in which it becomes necessary to open the abdominal cavity. The uterus is left freely movable, is not dragged upward from its normal level, and is held by ligaments capable of compensatory evolution and involution during pregnancy and the puerperium, and renders their detachment almost an impossibility.

TECHNIC OF THE OPERATION: There are many excellent methods described, viz. Gilliam's, Ferguson's, Simpson's, Richelot-Doleris,' Dudley's and Montgomery's, all based upon the same principle; and differing only in the manner of reaching and fixing the loop or ligament.

Montgomery prefers the abdominal crescentic shaped incision, which gives a good view of the anterior pelvic structures, but this is its only advantage. It has distinct disadvantages if growths, inflammatory processes and adhesions are to be dealt with in the deep pelvis.

The technic I have found most satisfactory is as follows:

1st. Complete all work necessary in the pelvis, such as removing adhesions, diseased adnexa, etc., and bring the uterus into the normal position:

2nd. Expose the edges of both recti muscles by splitting their sheaths:

3rd. Pick up each round ligament with catch forceps about one and a half inches from the fundus and pass under them a needle carrying either cat gut, or silk, to be used as bridles.

4th. Pass a pair of long artery forceps, preferably curved, into the edge of the abdominal incision at the lower angle, between the rectus muscle and its anterior sheath. This is made easier by lifting the abdominal wall with a retractor and making traction on the bridle around the ligament.

The point of the forceps is pushed to the opening through which the ligament leaves the abdomen and is carried over the pulley of the ligament, between the folds of the peritoneum. The periton-

eum is perforated, the bridle is seized and the forceps withdrawn.

This is repeated on the opposite side.

5th. The loops of both ligaments are then teased through these new grooves and lie upon the exposed recti muscles. They are then adjusted by sliding the proximal, or distal, end of the loop to equalize tension and are held taut until the peritoneum and recti muscles are sutured. The ligaments are then stitched together as they lie upon the recti muscles, and the aponeurosis is closed over them.

6th. If the folded ligaments cannot be approximated to allow stitching them together they may be disposed of by stitching them to the aponeurosis as performed by Montgomery.

It is best, however, to unite them when possible for in their new position they lie on muscle, are covered entirely by the aponeurosis and are not so liable to become strangulated as when pulled through the fascia.

7th. The abdominal incision is closed by tier sutures of cat gut, reinforced by one, or two, silk worm gut sutures.

Uncomplicated cases may be completed in fifteen minutes, the round ligament pull is in the normal line and the ligament is made doubly strong.

It is not necessary to insist that this operation is simply one of many expedients that may be necessary in a given case. All necessary plastic work must, as a matter of course, be completed before opening the abdomen.

Prevention of Tuberculosis.

By REMY G. DUCOTE, Bordelonville, La.

The prevention of tuberculosis means the preservation of the health of both the individual and of the community from infection. No subject in medicine has received more attention in the last twenty years than tuberculosis, its cause and prevention.

The discovery by Koch, in the year 1882, of the tuberculosis bacillus marks one of the most brilliant and most practical discoveries of modern medical science.

The diagnosis once so difficult to make certain, is now, by means of the demonstration of the presence of the tubercle bacilli, one of the easiest and most important helps to correct diagnosis in many otherwise doubtful cases.

Tuberculosis is common in many, and characteristic of, people and animals kept in confinement. So great has been the death rate and the rapidity of infection from tuberculosis that methods and means had to be provided to prevent and suppress the ravages of consumption in the human race.

The family physician is a potential factor in preventing the spread of tuberculosis among the human race. He should be held responsible for a failure to make a correct and an early diagnosis in the incipency of the disease. He should make a careful physical examination and from time to time a microscopical examination in suspected cases; that exhibit a general weakness of the lungs, badly developed chest, stooping shoulders, a dry hacking cough, loss of weight and appetite, subnormal temperature in the morning and slight rise in the evening.

Prof. Osler of Oxford says, "In the warfare against tuberculosis, the man behind the gun is the general practitioner, the battle cannot be won unless he takes an active, aggressive and accurate part, and all suspected cases be placed under his surveillance."

To prevent tuberculosis the physician should make an early diagnosis, and immediately notify the case to the local health officer, or some authority who would give instructions in regard to the care of the patient. An inquiry should be made as to the housing condition. Also that a change be made in the conditions of life which favor infection and a spread of consumption. He should be taught to observe strictly the laws of hygiene and cleanliness; that the disease is infectious and communicable; that the sick are the carriers of infection and precautionary measures must be taken to minimize the spread of the infection; that the rooms or apartments where tuberculosis patients live, must be effectively disinfected. Such are the every day measures that should be carried out by the patients and their physicians.

Koch says that institutions for those who are incurably ill with tuberculosis should be established, those dying of consumption confined therein. "This," he says, "would lessen the frequency and spread of tuberculosis." This was effectively proven in Germany, England and Sweden.

Dispensaries as planned by Calmette have been very popular and effective. The tuberculosis patients are visited in their home, instructions are given them regarding manner of living, use of spittoons, arrangement of rooms and diet. Aid is given in general and the members of the family should be examined after and carefully in order to detect the disease early. The plan is to give the patients expert advice adapted to the particular conditions of each patient.

So great is the struggle against consumption that anti-tuberculosis leagues have been organized in nearly every place where the disease is known to exist. The work done is most educative. These leagues co-operate with the boards of health.

When the patient becomes dangerous to the public he should be isolated and placed in a sanitarium where he would receive not only the medical and dietetic treatment, but also the instructions and care of the physician and nurse.

The boards of health should register the names of every patient suffering with tuberculosis, and monthly reports from every physician should be made to the board of health of all communicable disease existing in his practice, in order that proper steps be taken to check the spread of infection.

Laws prohibiting expectorating in public places should be strictly observed and the children in the school room should be made to furnish health certificates.

Dr. Wm. C. Woodward, health officer of the District of Columbia, suggests that the most important feature in the prevention of the spread of tuberculosis is the proper education of the community through the public schools.

Factors in Disease.

By JAMES BURKE, M. D., Manitowoc, Wis.

Disease in the ordinary acceptation of the term has three distinct stages: 1, depraved physiology; 2, resulting infections; 3, the battle with the toxins.

Bad physiology embraces the influence of habits, as tippling, with the indiscretions which usually follow on its trail; venery, which is generally one of the off-shoots of intemperance in the use of alcoholic beverages; several extraneous forces contribute to disturb physiologic function and thereby change the character of digestive ferments and glandular secretions. Through changed innervation, from a short rest of a rheumatic in a drafty hallway, through his peculiar cellular makeup, the chemistry of his body is changed and presents a picture of what in practice is called rheumatism. Under such circumstances infections can and do occur, but the retardation of the conversion of waste proteid into a finished excretory product is the most weighty feature of the symptom complex; this proteid matter must be aided therapeutically to become a normal waste entity, or in default of such aid, nature stores it up in the tissues in the form and consistency of leucomains.

These leucomains are the bane and burden of all chronically suffering patients; to be excreted, they must be resolved and filtered into the blood stream and there rounded out biologically and chemically before they can be excreted by the natural glandular agencies.

A knowledge of the various phases of the morphology of the leucomains would assist us materially in the diagnosis and treatment of disease.

Infections are only incidents in their formation; ptomains and leucomains are chemically and poisonously similar to the alkaloids of the vegetable kingdom. Ptomains are finished products of proteid matter from dead flesh, fish, etc., are to be encountered only occasionally in cases of accidental poisoning by ingestion; but how much the cadaveric alkaloid figures in anthrax poisoning is undetermined, but not inappreciable. After a long course of unphysiologic living, the accumulation of the leucomains in the tissues thereby produced, is a potential factor for evil; most sudden

deaths of men in active business and professional life are caused by the liberation of their poisonous leucomains into their blood stream at an inopportune time; we believe nature does utilize them many times to therapeutic effect—a selection by the cells of their needs, when other physiological agencies co-operate, resolving them out from the tissues and presenting them to the cells in form and consistency to be utilized by them.

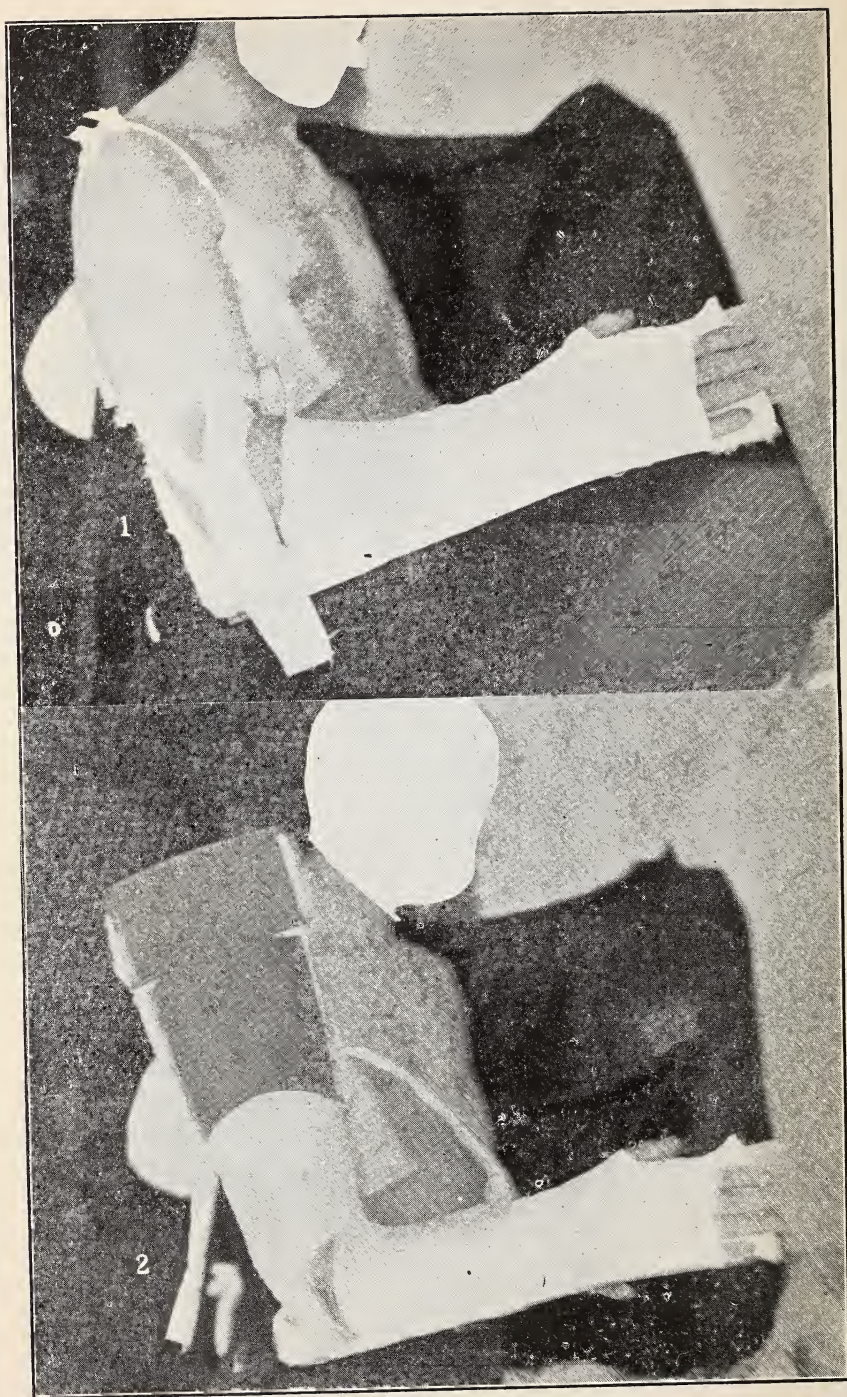
The uncertainties of the treatment of chronic ailments by the electrical current are based on our lack of the appreciation of the content and variety of leucomain poisoning confronting us in the several different cases we are called on to treat; if the therapeutic force used is timely and the liberated leucomain, under present blood conditions, will become a therapeutic entity, the resolving agent, whether the electric current, phytoloccin, potassium iodide or mercury, is a therapeutic success; but if opposite conditions prevail, failure ensues and the patient is made worse by that mode of treatment. As the result of infections, the proteid waste comes from the host's tissues, and his leucomains or toxins depend in quality and quantity on the facility with which the tissues yield to the destructive processes of the infection.

The study of the alkaloids of our pharmacopeal medicines will be a great help to getting a working knowledge of the symptomology of the leucomains (toxins); our empiric mode of giving veratrum or veratrin for a full bounding pulse recognizes the working of some force in the system which produces such an abnormality. What is it? Is it a leucomain similar in action to the alkaloid thebain of the opium group? Such, certainly is the case in puerperal eclampsia.

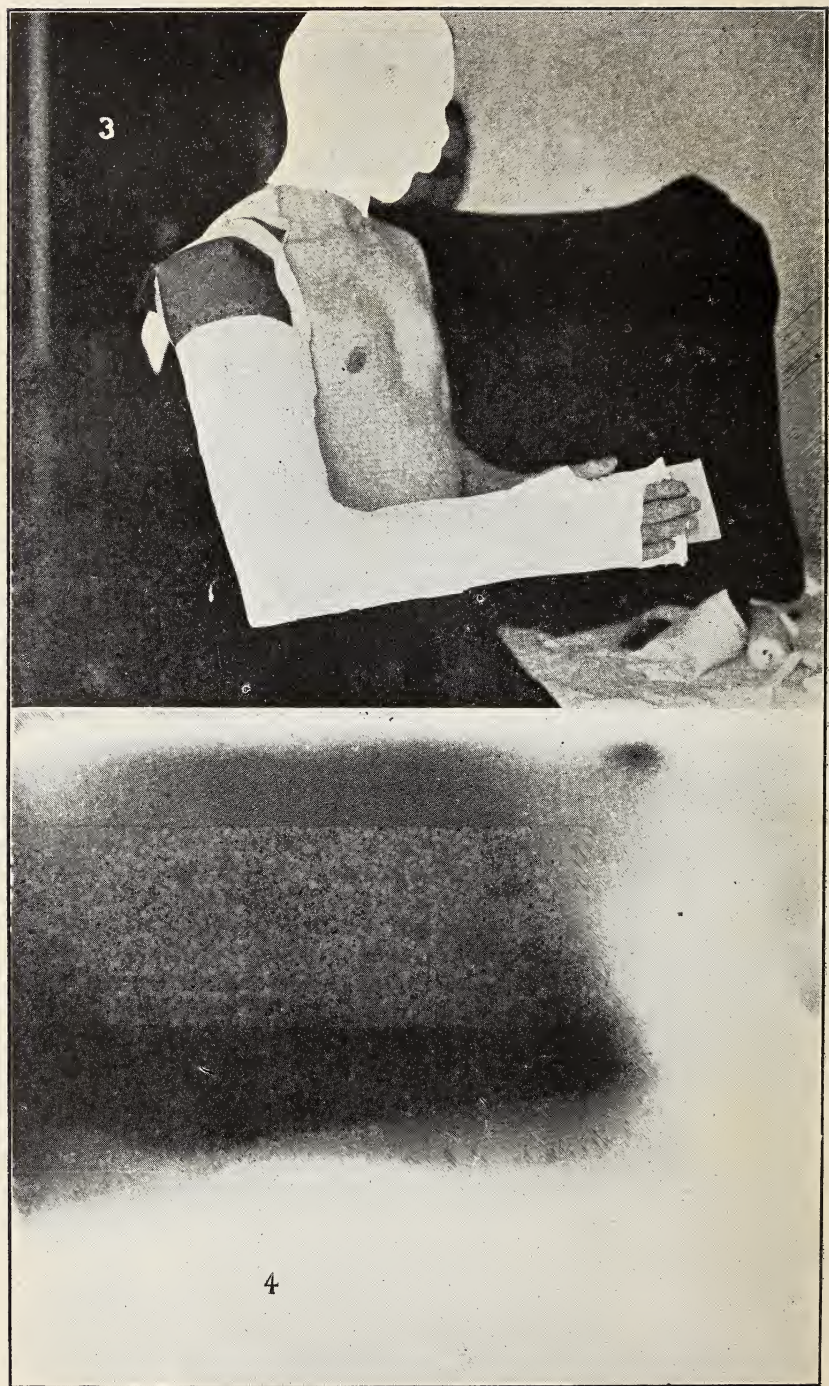
A Splint Bandage for Fractures of Humerus.

By J. D. BLOOM, M. D., New Orleans, La.

Humeral fractures, located between the upper and middle third result in non or false union more frequently than proximal or distal shaft fractures. As producing the outcome, various causes may be named. In contrast with the frequency of its happening may be questioned its occurrence by methods that in themselves may lend a contributory element to this probable result.



CUT ILLUSTRATING DR. BLOOM'S ARTICLE.



CUT ILLUSTRATING DR. BLOOM'S ARTICLE.

It is known that muscle tetany is associated or follows a trauma which results in a fracture. Muscle leverage added to this factor, with its length of play sufficient to influence the fractured end of fragments very perceptibly, must have a disturbing effect upon the perfect bony union that depends so essentially on perfect quiet. It is, therefore, very essential to secure immobility in this condition, and it has been made apparent by conditions in which operative procedure were required and no intervening matter was found. From a varying vascularity that movement influences, bony material is not thrown out in any proportion adequate to the need of such a bony union. This is explained, I think, and I am compelled to say advisedly, by the bony play, muscular tetany, mobility of the fractured ends, and direction of nutrient artery, which a splint or apparatus, that merely hides, will provoke. Quite a number of years have I been convinced of this, and to offset its occurrence have varied my procedure until the method herein recited was determined upon and time added sufficiently to give a trial that would warrant its acceptance along the lines of the essentials of this fracture treatment; namely, traction immobility and fixation.

My results have amply justified the thought entertained and after many years of trial, I feel sufficiently sanguine of the results to publish this description of the method:

1st. Extension, adhesive plaster strips are placed from the lower third or fractured limb.

2nd. An internal angular splint is applied, the padded axillary portion being bent five or six inches over the humeral which latter should be measured in length to the humerus of the healthy side. Then a temporary tightening of the axillary portion over acromion process of shoulder by a cord bandage. The forearm bandage is then applied, an assistant holding the hand, and this is followed by attachment of adhesive plaster to innerside of the humeral splint.

3rd. The humeral cuff is then applied, padded, having been measured to the arm and soaked in hot water to mould efficiently. The cuff has an extension above the shoulder joint for a distance

of two and one-half inches, depending upon the size of the individual patient, that is cut transversely one-half inch above the acromial level. The cuff is then bandaged to the arm in the lower third and this bandage carried comparatively loose in the middle third then over the extension of the cuff which is brought down over the shoulder, the temporary cord bandage withdrawn, and the bandage firmly secured to the axilla fold extending as it does to the arm, immobilizing the fractured ends and overcoming muscular tetany by the firm and secure immobilizing effect of the bandage. The elementary essentials of the splint should be kept in mind as the bandage is reinforced as shown in the pictures to add to its security and offset any effect possible through the drying process. I hope that the photographs will convey the text meaning.

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P. L. Thibaut, M. D., Chairman.

The Use of Guaiacol, Locally Applied, to Control the Temperature of Pneumonia and Allied Conditions in Children.

By JOHN L. SCALES, M. D., Alden Bridge, La.

I recently noticed an editorial that stated in effect, that a paper to be of interest on an occasion like this,

1. Should be brief. 2. Should relate to subjects of general interest to the profession. 3. Should deal with facts and experiences and not solely with theories, nor be a compilation from text books or other literature.

In endeavoring to conform to these canons I will guarantee to be brief, while I detail as best I can, some experiments in the practice of medicine that have been very suggestive and interesting to me.

The title of this paper which was submitted in haste, was not selected with discrimination, and would be more explicit and exact

if stated as, "The Use of Guaiacol, Locally Applied, to Control the Temperature of Pneumonia and Allied Conditions in Children."

I disclaim any intention of discussing the familiar and broad subject of the treatment of pneumonia in general, on which each of you doubtless has well defined theories and practice. I invite your attention to, and discussion of, this particular item of treatment: in doing so, I am not heralding a new discovery: all physicians are doubtless aware that guaiacol is a local antipyretic or rather, a general antipyretic when locally applied. Many perhaps used it in typhoid fever, for which purpose it was first advocated in this country by the elder DaCosta, I believe.

For all I know it may have been extensively tried, or be in common use at present for controlling the temperature of pneumonia, but none of my associates with whom I have discussed the matter have used it.

Practically all of the works on materia medica and therapeutics that I have examined, including the latest editions of Bartholow, Shoemaker, Butler and Potter refer in a general way to the fact that guaiacol is an antipyretic when used locally and state that it has been used in tuberculosis, pleurisy, typhoid fever, erysipelas, etc.

Mose of them either say directly or intimate that it is a dangerous agent and should be used with caution, Potter being the only exception. None of them seem to attach enough importance to recommend it.

The works on practice are singularly silent: neither Osler, Anders, Tyson, Thompson, Forscheimer, Caille, Babcock, or Holt on diseases of children have a word on the subject.

This silence may be and doubtless is due to the prevalent opinion referred to above, that guaiacol is a dangerous agent, as strongly stated by Hare in his *Practical Therapeutics*—"Clinical observations prove that guaiacol possesses powerful antipyretic properties—The true sphere of usefulness to be assigned to guaiacol as an antipyretic seems to be that of a less valuable measure than the

bath and equally powerful, and about as dangerous as the drugs of coal tar derivation."

With all due reference to the weight of authority that supports this dictum, my own experience thus far has not borne out that part of the statement that sets forth the danger of so using guaiacol: and when an agent is relied on in one crisis and not found wanting, we naturally turn to it in the next with more assurance, confidence growing with each successive trial, regardless of the opinion of others.

As is well known the problem of controlling the temperature of pneumonia is often both urgent and difficult, especially in children. Perhaps no well informed and conscientious practitioner of today employs coal tar antipyretics continuously in pneumonia; if at all, it is with fear and trembling and only because under the stress of circumstances it seems to be the least of many evils. Many do not approve of cold applications in pneumonia under any circumstances; at other times though theoretically approved and indicated, they are rendered difficult or even impossible of application by circumstances or personal idiosyncrasy.

At such a time a reliable and safe antipyretic would be a Godsend. It was under such conditions that I first tried guaiacol inunctions as a last resort, in a case, the salient features of which I will now report.

"J. M., age 16 mos., unusually large for his age, of magnificent physique and good personal and family history, after several days of respiratory trouble developed a well defined unilateral pneumonia. I saw the child in consultation and remained constantly by his bedside for several days. The temperature was characterized by a persistently high range. As matters progressed from bad to worse, I made the tentative suggestion that guaiacol be tried, but the physician in charge, a very competent man, and also very faithful, had never so used it and rather discouraged the idea of making any unknown experiments, preferring to rely on familiar measures. Tilden's antipyretic solution and tepid baths were administered; digitalis and strychnin hypodermically; Ducro's elixir and fresh beef juice when they could be swallowed.

A graduate nurse was in constant attendance and either myself or the physician in charge always in the house, often both. In spite of our combined efforts the situation increased in gravity. The tepid baths failed to control the temperature and in addition produced considerable cyanosis. Cold applications not only frightened the child but strange to say left a very pronounced degree of depression without a corresponding reduction of temperature either in degree or in permanency. High enemata of cold water almost produced collapse.

During the forenoon of March 18, 1906, the temperature ranged close to 104 and at 3:30 p. m. the temp. was 104.4, respiration difficult to get and the pulse as nearly as could be counted, in the neighborhood of 200. The child was apparently on the verge of dissolution and all agreed that the end was only a question of moments and a very few moments at that.

At this juncture I asked the privilege of applying guaiacol with the statement that it could not possibly do any harm, and applied about 15 drops in half dr. of albolene to the chest, covering it with oil silk: this at 4:30 with temp. of 104.6 and no pulse at all. In half an hour the temp. had dropped to 103.2, the respiration to 58 and the pulse was of fair volume at 148, being a decline of 1.4 deg. of temp., 12 of respiration and at least 50 of pulse in $\frac{1}{2}$ hour. The child which had been almost in convulsions was resting easily, the first sleep for hours; there was no cyanosis, no profuse and exhausting sweat, no apparent depression. In short, the clinical picture represented the extreme contrast of impending death and comparative comfort, and is one of those indelible pictures that cannot be adequately described.

This result could not have been the result of a coincident crisis, for in about four hours the conditions practically returned, as they did repeatedly, but never with the extreme gravity of this instance.

The following table taken from the chart kept during this illness shows the following interesting figures which give the height of the temp. when the guaiacol was applied, the lowest reached, the number of degrees of net loss, the number of hours during which

there was a continuous decline and the number of hours elapsing from the time the guaiacol was applied until it had reached the highest point again.

No.	Page	Degree	Degree	Degrees	Hrs.	Hr.
1	8	104.6	100.2	4.4	3	6.25
2	9	105	103	2	.5	2
3	10	104	100.4	3.6	.8	4.5
4	10	105	103	2	1.3	3
5	10	103.8	100.8	3	3	4.3
6	10	104.5	101	3.5	1.75	5
7	11	103.8	99	4.8	3	6
8	11	103.8	98.8	5	2.55	4
9	12	104.2	96.8	7.4	4.6	
10	12	103	99	4	3	
11	14	102.8	101.8	1	1.75	3.5
12	17	105.2	101.4	3.8	2	4
13	18	105	101.2	3.8	2	3.5
14	18	104.6	101.6	3	1	3

To go more into detail—for instance on March 20, 2:45 p. m., we had T. 103.8, R. 54, P. 156 when guaiacol was applied. At 3:15, $\frac{1}{2}$ hr. later, the temp. had fallen to $102\frac{1}{2}$, or 1 degree. At 4:20, or practically $1\frac{1}{2}$ hrs. from time of application the temperature showed a further fall of $2\frac{3}{5}^{\circ}$, respiration dropped from 54 to 32 and pulse from 156 to 118—showing quite a contrast.

Again, at 8:50 p. m., same date with temperature 103.4, respiration 42 and pulse 142, guaiacol was applied. In 50 minutes temperature was 102.4, a fall of 1° ; pulse was 134, a decline of 8 beats per minute. One hour later there had been a further decline of 30 pulse, 26 slower, and then still another hour a further fall 1.2° in temperature, making lowest point 98.2 with pulse 114.

At 2:40 temperature 104.2° , pulse 134, with application of guaiacol. One hour later temperature 100.8° , pulse 128; in still another hour temperature 98° , pulse 112 and this later still temperature 96.8° , pulse 106, thus giving an apparently alarming fall of 7.4° to 96.8° , but even at this point the pulse was better than at

any other time previous. However, it was not intended to reach or maintain so low a level and gentle stimulation was resorted to.

Here are a series of 14 experiments extending over 5 days characterized by practical unanimity of results as follows, viz: rapid reduction of temperature without cardiac or vascular depression, no cyanosis, no exhausting or profuse sweat.

The greatest fall in any one period, that is through a whole period of continuous decline to the time of renewed rise was 7.4 degrees in 4.6 hours. The most sudden drop was 3.6 degrees in fifty minutes. The average decline per application was 3.6 degrees. The average period being 3.7 hrs., at the end of which the temperature generally rose rapidly to the original point.

After the series above reported, there were two or three instances where the guaiacol failed to reduce the temperature as decidedly as before or at all, but it is a very significant fact that this rise in temperature followed an apparent beginning convalescence and was attributed to intestinal disturbance from too much food which the child had begun to take freely. The bowels were thoroughly emptied with calomel and oil, and high enemas, turpentine stupes being applied meantime, after which the temperature gradually declined to normal and recovery was uneventful.

Since this case I have used guaiacol a number of times in children; it has never failed to control the temperature satisfactorily in inflammatory conditions of the lungs and bronchi, proving as satisfactory in those catarrhal bronchial conditions where the absolute differential diagnosis of bronchitis or broncho-pneumonia is difficult, as in the case above detailed of lobar-pneumonia.

Recently I have used this agent in two cases where I was just about ready to announce a diagnosis of pneumonia: one a baby of about 14 mos. of age, the other a girl of 4½ years, robust and well developed. This last case gave me quite an agreeable surprise. She had a hard chill 24 hrs. before I was called, and when seen had almost constant cough, pain in the side, very rapid respiration, blood-tinged and sticky sputum, temp. 105.5, pulse 150, appreciably increased bronchial breathing and dullness on percussion.

In short the classical signs and symptoms of incipient lobar pneumonia.

The temperature responded promptly to guaiacol inunctions, several of them being required; other measures indicated were of course used. It is interesting to note, that after the first application, the child insisted on having it reapplied frequently, saying that it relieved the pain in the side. On the third day the child was dismissed.

I am convinced that this case would have been considered one of aborted pneumonia by that increasingly large circle of enthusiastic gentlemen whose reported cases of aborted pneumonia are appearing with such regularity in certain medical journals. During the preparation of this paper I have been treating a negro baby only 10 months old for a severe left-sided lobar pneumonia: the environments and the nursing were about as unhygienic and incompetent as they are generally encountered under such circumstances, and that is saying a good deal to the initiated. I made the first application of guaiacol myself in order to watch results: I got all the good effects I expected with no untoward results. I then left the mixture with instructions to apply it as I had done whenever the fever went "very high." At this writing, the ninth day of the disease, there is every indication that the child will recover.

I have used guaiacol a number of times in children with high fever from malarial infection, but with indifferent results.

To account for the effects of guaiacol thus used two theories have been advanced, viz., that it acts directly upon the terminal nerve filaments and thence reflexly upon the thermal and vasomotor centers: also, that it is absorbed into the blood current, and acts as an antiseptic by direct action upon, and combination with, the toxic material therein.

The limits of this paper will not permit a discussion of this interesting point, but it seems to me that the former theory correctly accounts for the rapid decline in temperature. It is said, however, that guaiacol is recoverable from the urine in 15 min-

utes after local application, and I am inclined to believe that good results follow its absorption, because in those cases where I have used it, it has seemed to exert a favorable influence unaccounted for by its antipyretic properties.

I readily recognize, however, that this proposition would be difficult to substantiate before an unprejudiced jury.

I am quite well aware that one is not justified in adducing a rule of practice from one case or one hundred cases; that it requires a great number of observations to give to any theory the dignity of a law: and further, that it requires no little temerity for me to assume that guaiacol is a harmless agent.

Nevertheless my experience seems to justify me in believing,

I. That guaiacol when applied locally in oily solution, in quantities of from 10 to 30 drops, according to age will reduce the temperature of pneumonia in children with rapidity, safety and certainty.

II. That it possesses peculiar efficiency in certain diseases of the broncho-pulmonary system, and seems to exert a favorable influence aside from its antipyretic action.

III. That if it is both effective and safe, its cheapness and ease of application would make it an agent of great value.

Syphilis with Notes on Symptomatology, Hygiene and Treatment by the Inunction Method.

By L. G. LEBEUF, M. D., New Orleans, La.

The responsibility of the clinician towards this disease, the duty he owes society in his attitude towards it, and his hygienic handling of its symptoms and cure, is one of the most serious and most delicate tasks assumed by us. Society, with its thousands and millions of degenerates, with its worlds of pathologic wrecks, the millions of unborn who will multiply and reproduce syphilitics themselves, has a right to call a halt and hold our profession to task for the tremendous obligation assumed by us.

History has its awful examples of the dangers incurred by the

lack of control of this moral evil—from the massacre of *La St. Barthelemy*, by the degenerate Valois, to the thousands of miserable wretches whom we meet with every day, with syphilitic psychoses and paranoias, to the greatest harm and danger of society.

Do we always perform our full duty in our management of this disease; do we succeed in fully safeguarding humanity from the dire effects by our ordinary treatment? In hospital clinical work we treat only symptoms; prescribe for the actual condition as seen and as presented by the patients themselves. A patient comes with a well defined primary sore, with mucous patches, alopecia, with fever, roseola rash or eruption, with muscular or arthritic pains, brain lesions or tertiary nervous phenomena, and we prescribe mixed treatment, the regular formula or bichloride of hydrargyrum, with kalii iodide and sarsaparilla, or something similar. We also tell them to come back to us, and try and impress them with the necessity of continuing treatment for a few years. How many of them return; or if they do, how many really fully appreciate the importance of the continuation of this treatment? It is human nature to abandon disagreeable treatment, the moment the pain or sore or tangible effect is removed, and we see this more so in hospital work, but we see it also in our private offices when we deal with the alleged better class—with them, it is the inconvenience of the treatment, the restrictions, the privations and the social difficulties which are the obstacles. And then ourselves—do we always lay down rigid enough laws; do we not content ourselves too readily with the specific efficiency of the drug prescribed, and forget the general hygiene and the absolute enforcement of an iron clad *regime* of diet and conduct?

The wrecks in the path of the syphilitic are so frightful, so disastrous, that it seems to me it is time for us all to call a halt and reflect on the dire consequences; the awful results to the innocent third person; the unfortunate wives; the unborn fetus before its birth marked with the mark of Cain; heredity with its tragic line of scrofula, rachitis, epilepsy, hydrocephalus and insanity. Think of the wrecks strewn along its path, this Juggernaut of Society, this scourge of the world! Physical death, social, moral and mental

death. Some author has just compared the havoc of this disease to the effect of the Manacilles Plant, or Death Tree of India, under whose outstretched inviting branches the sleep of death was always found. Well, it is with the physicians to prevent some of these disasters and it seems to me that we have to bear some of the responsibility and obligation of diminishing these results.

The therapist, speaking before the age of serum taught us that there are possibly only two diseases which have two specifics to control and neutralize their bad effects, and these are malaria by quinin and syphilis by mercury. Whatever may be the proof of the contestants today, with the modern laboratory working out experiments every day to elucidate the action of drugs or specifics on body metabolism, I believe scientists still think that mercury properly administered and followed out long enough will finally control syphilis; but that is the *crux* of the entire subject, it must be administered in a proper form, in a proper dosage, and long enough to be absolutely certain that you have reached the seat of all the trouble and eliminated all the poison, virus or germ. It is not just for us to treat only symptoms and accidents of the disease—it is the diatheses, the cachexiæ, the future welfare and permanent happiness of future generations, which the conscientious, God-fearing physician has in his hands. Do not be satisfied to relieve an arthritic joint or to get a gumma to disappear; but look after the individual and integral factor which he performs in the universe and the importance of his perfect health to the progeny which may follow him.

No arbitrary rules of treatment can be followed; each case must be managed according to its symptomology and the clinical demands. The urgency of the case must be considered, the age, the station in life, the occupation of the individual, his habits, whether any intercurrent conditions exist, cachexial, diathetic. In an attempt to place a few practical points before you, from the view point of a general practitioner, let me say that I have divided my subject, possibly arbitrarily, between symptomatology and treatment, and I have done so because of the great importance of the study of these two subdivisions.

SYMPTOMATOLOGY.—In spite of the medical information we may have and the picture which the symptoms of this disease has impressed on our mind from our first lessons in clinics and hospitals there is no subject more important in the proper study of the recognition of the disease than that of symptoms;—for there is no subject which allows of more variations and in which a physician is more apt to err.

The ordinary cases seen from the primary sore to the later sequelae do not admit of any doubt or any difficulty. It is the A. B. C. of our profession to diagnose primary, secondary and tertiary syphilis when you get the plain, unmistakable symptoms laid down by our text books. It is fairly easy to make a diagnosis when you have a *primary sore* on the genitals, communicated eight to twenty days after sexual relations. This sore, a small erosion, papule or vesicle generally single, though sometimes multiple, has usually an ill defined round appearance. It heals at its locus and leaves in its place a hard nodule or cartilaginous consistency within the skin, and is the initial sclerosis. It sometimes ulcerates and becomes gangrenous. Often, when it is extra-genital, it has no induration. The corresponding lymphatics are next affected from the lymphatic vessels. We also see general infection communicated without primary sore;—it is called then *la Syphilis d'emblée*.

SECONDARY SYPHILIS—Following six to twelve weeks after primary lesion secondary syphilis is also fairly easy to recognize. It is ushered by headaches, thirst, fever, pains in the joints, and eruptions of skin and mucous patches. The macular, brownish red patches on flexors and in palms of hands and on soles of feet are nearly typical. The roseola is also easy to diagnose, but the papulous, the pustulous, the squamous and the lichenous are not so easy to diagnose from lichen, eczema, psoriasis and variola and we have to be exceedingly careful.

The tertiary form with its deep seated bone and brain lesions is the actual *terra incognita* of the whole subject, and it is there we have to use all our diagnostic ability, and with this form I want to deal specially.

Symptomatology is then easy, but it is not always that we get a

perfect, clear history of symptoms. Syphilis, with its well known basis of treatment, is possibly an attenuated disease, attenuated or obscured in its symptomatology by the fact, first, that the patient presenting himself may have been under treatment some short time before you saw him, or secondly, he may have contracted the disease from some one who was under treatment, diminishing the virulence of the infection, or thirdly, the symptoms presented or related may be related in a way to attempt to deceive or mislead the physician.

Syphilis does not always carry its distinctive symptomatic signs, so clear and so plain, that it can be read at once. It often takes a great deal of study and a great deal of discrimination to make a positive diagnosis, and even then how many obscure cases which have not improved when treated for other conditions, placed under what, in our ignorance, we have learned in hospital practice to call the therapeutic test, readily answer to mercurialism. Very often a diagnosis has to be made on one symptom. The disease is frequently recognized in a parent by the diagnosis of a symptom in a new born child. Instead of taking your time, with a repetition of the well known symptomatology of this affection, I have compiled a few cases, presenting some obscure symptoms with some peculiar difficulties, and I wish to ask your indulgence in reading the synopses of these cases to illustrate the most salient points in the symptomatology of this affection.

Case 1. Male adult, P. N. G., age 27, who ten years ago, thirty days before his marriage, exposed himself to contagion, and came to me with a well marked primary sore. It was treated and it healed rapidly. He was placed at once under mixed treatment. The strongest efforts were made to prevent his marriage, but all to no avail. His treatment was followed only very irregularly. His wife became pregnant and, though she was placed under treatment, it was a very difficult matter to carry it out efficiently. Her child, a forceps case, was still-born with the typical appearance of a syphilitic child—skin and cuticle all removed, and face and limbs thin and emaciated. The second and third deliveries, when the father was in a very good condition and under proper active mixed treatment, but mother under irregular spasmodic treat-

ment, caused both children to show signs of hereditary syphilis. One child, hydrocephalic, died at two years of age, and the other had ozena and is now under inunctions. At that time I changed treatment to mercurial inunctions, both for the mother and father, and I have just assisted at the birth of an absolutely healthy child, showing the greater benefit of the external over the internal procedure.

Case II. X. Y., age 32, white male, leading a rather dissipated life, drinking considerably and under very bad hygiene and diet—tobacco and venery. Several years ago a diagnosis of syphilis was made from the peculiar copper colored red maculae on his legs; pain in limbs and joints, no primary sore. Shortly after this Dr. Knapp of New York treated him for syphilitic iritis; though there had not been any sign of primary lesion, he was placed under mixed treatment. His stomach could not stand this and it had to be abandoned. For about five years he remained under an irregular, disconnected kind of treatment, taking at times Garnier and Lamoureaux protoiodide pills and at times stopping even that—all this time drinking champagne, smoking, and leading a horrible, unhygienic life. When I saw him first, two years ago, he was in an intensely nervous state, had no symptoms of the former trouble, except in an enlargement of two or three postcervical glands and large indurated mucous patches along the edges of his tongue, from the base to the tip, simulating the nicotic erosion or cicatricial granulation which you see in malignant cases. He was placed under a course of mercurial inunctions at that time, and after seven weeks of rubbing he improved materially, but as this treatment was unpleasant and loathsome, I could not get him to persevere. In personal consultation and by consultation by letter with Drs. Sam Alexander of New York, Alfred Fournier of Paris, Hutchinson of London and Baldsoe I altered his treatment to the hypodermic method. In Europe they used 10 c. c. of 0.05 *Huile grise*; while in this country we use gr. j of salicylate of mercury in sterilized albolene injected deep in the gluteal muscles. About 100 injections were used in about fourteen months without accident. This treatment is quite painful and at times, when the part to be injected is

not properly massaged, quite a spot of induration remains, and it is very uncomfortable. During this injection treatment the patient lost flesh and became anemic—the sclerotic ulceration or nicotic mucosa or granulated appearance of his tongue reappeared, so I again placed him under the inunction treatment with iodide of potash with syrup of orange peel. After two weeks the glossitis was well and he is now improving steadily.

Case III. Cornelius H., colored male, age 27, contracted syphilis 8 years ago. Was treated only a few weeks. Never followed treatment since. Two weeks before he was seen by me, he was examined in a hospital clinic for an enlargement of right elbow and shoulder joints. He was told to come back and be admitted in the hospital to allow the surgeon to operate on his joint, as there was fluid in it, and that the condition was a tuberculous one. When seen by me he had a great pain in those two joints as well as in the left elbow joint. Temperature 104°, emaciated, anemic, and suffering considerably. Joints were radiographed by Dr. Perkins, showing them to be clear. Glands of neck and groin indurated and enlarged. I started inunctions with 10gtts. of saturated solution of iodid—increasing one gtt. daily up to 30 gtts. t. i. d., and within twenty days all symptoms had disappeared. The patient has perfect use of his arms and has increased 22 pounds.

Case IV. Mrs. B. S. new born baby. Three years before the birth of this child, I treated the mother, then an unmarried working girl, for a vulvo-labial abcess which I incised. She then gave the history of having had a small, hard pustular sore on the labium-minor three weeks previous, but no other evidence of infection. I lost sight of her until some months after her marriage, she sent for me to attend her six day old baby, who was born with every manifestation of hereditary syphilis. I placed the baby on mercurial inunctions, 10 gr. with equal parts of lard, and within three weeks the eruption and condition of emaciation and senility seemed to improve. Since then this treatment was interrupted at times for the substitution of syrup feri iodid 5 gtts, t. i. d. The child improved wonderfully and gained in five months 12 pounds. A few weeks ago, while in splendid condition, some error in diet gave it cholera infantum and it died after one week's illness.

Case V. Mr. M., age 56, residing in North Mississippi, male adult. Has enjoyed perfect health all his life; does not remember any venereal lesion in earlier life. About one year ago he began having intense pains in right side of head and frequent attacks of a circular vertigo. Once, while bending over, he fell on his face, bruising himself badly. Examination showed no signs of pressure on brain and no reason for symptoms, except some enlarged cervical glands. Headaches were so continuous and intense that all kinds of medicine were tried. He had lost flesh and had become very depressed in his mind, so the mercurial inunctions were begun with 30 gr. doses of iodid of potash. Today, a year after inception of massive, external treatment, he has increased forty pounds and has been entirely relieved of his headache and vertigo.

Case VI. Mr. H. A. V., white adult male, age 46. He had ten years previous a primary sore on genitals, at that time diagnosed chancroid, but later believed to be a chancre. Treatment begun and followed for six months and then discontinued. When married later, and his wife had given birth to fine, healthy children, he felt he was perfectly well. Two months before he was referred to me by a confrère, he began rapidly losing flesh, and had almost continuous suffocation spells with intense pain in his chest under the region of the sternum, back and front. His physical examination, found nothing abnormal with heart and lungs, except a marked dullness of an irregular mass about the region of the mediastinal space. No aneurysmal bruit nor any sign of any endarthritic condition. Sarcoma of the middle mediastinal space had been diagnosed. An X-ray radiograph showed a mass extending from the first and second intercostal interspace to the beginning of the ensiform cartilage lapping over, and $1\frac{1}{2}$ to 2 inches on each side of the sternum. The edges of tumor looked uniform; no tuberosities or irregularities in shape. As all treatment had failed, and as patient had lost 61 pounds, and as he was becoming a morphine maniac, I remembered the old adage, "when in doubt play trumps." I placed him under inunction and iodide of potash. He improved wonderfully inside of six weeks, and was able to stop his opiates, gained forty-two pounds, resumed his work, and when X-rayed

again, three months after inunction had been used, found the tumor almost gone. I followed his case for about six months, during which time his improvement was marked. Since then I lost sight of him and I heard that the condition had returned and that lately he had died; but I could not find out the cause of his death—I have no doubt, though, that he had a gumma of the middle mediastinal space.

Case VII. Mrs. J. F., age 36, white female, married, with a number of children. Husband a policeman whom I had treated for syphilis. His wife came to me about two years ago with mucous patches in mouth, a severe sore throat, and a decided falling of her hair,—cervical and epitrochlear glands quite hard and enlarged. Placed under mixed treatment for a year, these symptoms were controlled at first. Later, when she had neglected treatment, she returned to me with gummatous enlargement of forehead, and most intense, continuous headaches. I then placed her on inunctions, and today, one year later, she has entirely recovered—gained in flesh and has had no more evidence of her trouble.

Case VIII. Capt. J. C., retired light house service pilot, age 72. History of syphilis fifty years previous. Was shot through the mouth at the 14th of September Riot, 1874, while on Metropolitan Police force resulting in small opening in roof of mouth. This greatly enlarged and a good deal of carious bone was removed. Later, a large copper and gold amalgam plate was placed in opening and remained *in situ*, without removal for thirty-two years. When I was first consulted for his syphilitic symptoms, he was suffering with one of the most unusual peculiarities that I have ever heard of in my twenty years experience. Besides a good deal of headache, he had a continuous noise or rumbling in his ears; this was incessant and, at first, nearly drove him insane from insomnia. It was a low, buzzing noise like the noise of a captured bee. In sheer desperation, often using fruitlessly all the anodynes and soporifics which I could venture to give him, his own peculiar ingenuity led him to place two large seamen's watches or small clocks over both ears when he wanted to go to sleep, and in this way driving out the other noise and allowing him to go to sleep by the mere monotony

of the tick, tick, tick. This is a new hypnotic, but certainly as efficacious as any I have ever heard of. The iodid bichloride treatment did not benefit him and when I began the mercurial inunctions a very peculiar eruption took place all over his body, with terrible itch. He had dreadful colics and bowels ran off; became considerably depressed, and also became salivated. It was at that time that I found the copper plate in his hard palate which closed the hole in the roof of his mouth. It was in an awful state of corrosion, and possibly had had something to do with the bad effect of the mercury. The plate was removed, after having remained intact for thirty-two years—his wife who had been with him twenty-nine years, never knew of its presence in his mouth. Shortly after this he improved considerably and is now able to go about, though still under treatment. The noise in his ears and head much less, but at times still using his ticking hypnotic.

The next two cases I will relate only briefly, as I have asked the neurologist, Dr. Van Wart, who saw the cases with me, to give you a synopsis of the notes he kept of the nervous phenomena.

“Mrs. F. R. R. was seen in consultation with Dr. L. G. LeBeuf.

The patient was poorly nourished and at the time I saw her she had been having severe headaches, difficulty in vision and convulsive seizures. The headache was severe and worse at night. The convulsive seizures had become of the Jacksonian type involving the left arm and leg. Examination of the eyes showed a severe double optic neuritis. The pupils and ocular movements were normal. The reflexes were active and equal on the two sides. There was no ankle clonus and no Babinski's Sign. There was slight impairment of sensation to pain, touch and temperature in the left hand and arm. There was inability to distinguish the form of objects held in the left hand. There was marked weakness in the left hand and arm and this weakness was present to a less extent in the left leg. The weakness was worse after the convulsive attacks.

The case is of great interest as indicating the starting of a guma in a silent area giving rise to general convulsions and later as it grew forward to sensory disturbances and asteroagnosia and still later to Jacksonian epilepsy and paresis of the hand, arm and leg, involving successively the sensory and motor areas.”

Case IX. Mrs. F. R. R., white female, married, age 28, with four children, presents the following interesting phenomena: With no history of specific or hereditary lesion, no history of the disease even in husband. Patient always a nervous subject, but perfectly healthy until birth of last child, when, on ninth day, suppressed lochia took place and she was seized with violent post partum eclampsia. She had nine convulsions, and when they were controlled, urinalysis showed some albuminuric nephritis. Sight became very bad and patient became greatly emaciated and in a semi-imbecile condition,—not able to look after her children and household affairs. When she recovered from this she kept on having spasms, but always at night in her sleep; especially around the time of menstruation. She would have from two to twelve each month. Every physician in the country was consulted, even to Prof. Osler in Baltimore. All, or nearly all, called it epilepsy. Dr. Osler called it *N-E-R-V-E-S*, as she was always willing to tell, sarcastically. A competent gynecologist-surgeon here found a loose kidney and anchored it, and for a few months she was better. A little over a year ago, I was called to her and saw her in one of her typical attacks. This was the most serious of all her previous attacks; it lasted almost continually for six days, and was most rebellious to medication. It was a typical case of Jacksonian epilepsy; though, between attacks and after they were over, the left arm and leg remained partly paralyzed; sight nearly gone—could merely distinguish strong light. Making a diagnosis of gummata of the brain, I began the inunction treatment, and within a month she was a well woman. I gave her also 10 gtts. of saturated solution of kalii iodid, gradually increasing one drop at a dose one hour after eating t. i. d., until 30 gtt had been reached. She had no other convulsion and within two months had gained 33 pounds. She resumed her household cares, recovered her sight, and for the first time in five years is now able to go out shopping alone. The treatment since has consisted of three courses of mercurial inunction of thirty-five days each of six months apart with 30 gr. of potash and during the six months interval. Twice, since, she has had faint clonic night attacks; one while in great pain from a bone-felon which I had to lance, and another time after a great mental shock.

Case X. This case, or the last case I have compiled for this short paper, covers some interesting points.

M. K. V., age 46, unmarried male of good habits both regarding tobacco, alcohol and personal hygiene. Some years ago contracted syphilis and was treated in a large railroad town where he lived. He was placed under treatment and was sent to Hot Springs, where he took a course of baths and treatment. Later, this treatment was neglected, and only followed interruptedly. He lost flesh and became emaciated; his stomach became in a very bad condition and he had to give up his position. He became morose and irritable. He went to Central America to assume some other occupation in a different climate with the hope that this change would help him materially. He did not improve, and as his work forced him to board incoming ships at the seaport where he was occupied, his friends observed that he had some difficulty in getting up the ladder or over the gunwhale of the boat. One day he was found lying unconscious in quite a pool of blood from a bleeding hemorrhoid. This was easily controlled, but he did not regain consciousness. He looked as if he was paralyzed. Three days after this he was placed on board of a ship and brought, still in this same unconscious state, to the N. O. Sanitarium, where I was called to take charge of him. There was no history. Those who brought him knew nothing more than the history of his coma. When seen, a thorough examination was made, his blood, urine and feces were examined with negative results. He had no fever, but gave the nervous symptoms as described by Dr. Van Wart.

"M. K. V. was seen in consultation with Dr. L. G. LeBeuf at the N. O. Sanitarium. The patient was in bed in the dorsal decubitus. He was semi comatose and unable to answer questions or assist in the examination. There was incontinence of both urine and feces. There was marked motor weakness, most marked on the right side. This was determined from the purposeless efforts of the patient to resist being moved. The reflexes were markedly exaggerated in the upper extremities. The knee jerks were exaggerated and there was a patellar clonus on the right side. Babinski's sign was present on both sides.

The pupils reacted to both light and accommodation. There was difficulty in moving the sight inward. There was no ptosis. Examination of the eyes showed a well marked double optic neuritis.

Three days after he was first seen there was a marked tremor in the right hand and arm. The symptoms gradually disappeared under treatment."

I immediately placed him under mercurial inunction rubbed in daily with 10 gtts. of potash, increasing to 30 t. i. d. On the seventh day of this treatment he began improving most markedly, and within a day or two he could articulate a few words, and the first words he said were to approve of the treatment and repeat the name of a prominent physician in the town where he had lived, five years previous. I telegraphed him inquiring about the patient's condition. My confrère answered by wire and came here to tell me I was perfectly right in the symptoms diagnosed and in the treatment. He has since recovered almost entirely, though his inunction treatment, as I had mapped it out, has not been carried out where he lives in an adjoining state, but he is nearly well and wrote me the other day.

TREATMENT—*Syphilis* (as these preceding notes prove) shows no symptomatology which allows us to read its diagnosis as if it were labeled on the forehead. Many times we have cases which are most difficult to diagnose, and it is in these cases that we have to be careful of treatment. A choice of a given line of treatment should be due entirely to the clinical demands of the case. No fast rule of procedure can be followed. The age of the patient, his occupation, sex, the demands of the case, the point of tolerance of each individual must be a study of each case. The cosmetic surroundings must be taken into consideration, also, the secrecy—you must attempt to gain the full confidence of your patient because you will then be able to accomplish tenfold more good for him. There must be absolute truthfulness between patient and physician. You must explain the length of the fight ahead of him, do not discourage him too much, and by your self-confidence and conviction assure him of his final recovery, so as to enforce his strict follow-

ing of your commands and directions. Be guided by the cachexia or diathesis. Look out for the flabby subject, the rheumatic, the gouty, the tubercular, neurotic and malarial, as they stand treatment badly. The general hygiene must be perfectly preserved, for besides the depression nearly always caused by the presence of the specific syphilitic toxin or germ, the mental depression caused by the imperfect knowledge all people have of the dire effects of this trouble, nearly always produces marasmus, this pushed at times even to self-destruction. Lay down the purpose of the treatment in as easy a manner as possible; give rigid rules regarding separation and incontinence from family relations. Follow a simple but nutritious diet; no overfeeding, no drinking, sleep must be regular. The nervous system must not be overtaxed, as the wear and tear of that might cause brain and mental disturbances; especially with the higher classes. Though alcoholic abstinence is indicated, do not push the restriction to excess, as it may work too great a hardship on an already unhappy individual. Only allow light Burgundies and clarets or a little stout or malted milk. Excessive sexual indulgence is very exhausting, so it must be restricted. Taylor says, "Very many cases of cerebral and nervous syphilis have their origin in sexual excesses, and many men have become infirm or have perished from such overindulgence while suffering from syphilis." If less emphatic and dogmatic about alcohol and sexual excesses, we may be absolutely so regarding tobacco, because both smoking and chewing is the most frequent cause of serious lesions of the tongue, mouth and throat. Let it be used only in cases where tobacco does not irritate the mucous membrane. Look out for the stomach and gastro-intestinal tract, the bowels, obviously are generally loose, but neither they, the kidneys nor the liver and stomach should be overtaxed. Dress warm and appropriately, and do not keep on wet shoes and clothing. The local hygiene of the mouth is all important; especially while using inunctions. A most important thing to remember always is that we must see our patients quite often, even after the objective signs of the disease are removed, for there is no disease in which the patient is more apt to be tempted to drop and discontinue his medication than in this,

and if you do not see them frequently and exhort them often, they will do so promptly, and worse symptoms will follow. Or if they do follow treatment rigidly, if you do not ask them to return to you, they may think you have no interest in them, and the good you may have done is lost by some change of physician.

I cannot enter into the entire discussion of treatment, but will only speak of the method which has been most unfailing in my practice.

Mercury by Inunction, observing proper hygienic precaution, has been the most valuable of all methods of treatment in my hands—I may even say, nearly infallible; especially when I have wanted to get quick and certain effects, or when the severity of the case called for prompt results. The following indications should call for its use:

1° Severe cerebral cases, involving the eyes, the brain or serious neurotic symptoms, and in tertiary syphilis.

2° The very young, the new born, on account of the readier absorption and the necessity of preserving the digestion intact.

3° In gastric cases, or dyspeptics whose irritability of the entire gastro-intestinal tract must be respected.

4° Then whenever promptitude and exactitude of action is the pre-eminent factor.

5° Use this method in preference, because of the many chemical changes which the saline derivatives may undergo by the action of the stomach and intestinal juices, while on the other hand by this method the drug is thrown right in the circulation. I have frequently seen the effect of this method on lesions in five or six days, and in two cases I saw a gold ring and gold collar buttons change and become a mercurial amalgam in six or seven days.

6° In most cases of this disease, you want to *mass* the treatment in the very beginning to get all of the work of the drug in early. The first six months of treatment is the most important period of all the life of the virus or germ. By inunction you seem to block off the virus from the lymphatics quicker and more effectively. At any rate, it seems plausible, as the route is shorter between the infecting lesion and the lymphatic channels and glands.

It looks logical to me that you can affect the infecting granulation cells easier by this endermic method than you can by being forced to saturate the whole system before you reach these external skin lymphatics.

A very peculiar historical observation with regard to the form of mercurialism is the fact that its present popularity has shown how often the pendulum has swung back in this as in many other things in our profession.

The inunction treatment was known in earliest times and always held in high repute. Rabelais spoke of its use; Francastor mentions it in his poem, *La Syphilis*. Gaspard Torella, in 1497, condemns the universal use of the murderous ointments of the charlatans of that time for this disease. Ulrichs Hutton also mentions its use. Though syphilis had been known in Rome, according to Littre, Larousse and Robin, from the earliest times, the exact facts regarding it and its treatment date from about 1494, two years after the discovery of America. It was believed, formerly, that it could be traced to the time of Job, and then later it was traced to the time of Horatius, and it was believed that when Antonius Musca had Octavius rubbed with salves before a hot fire for a skin disease, "*Unctum sapius sudare ad flammam*," it was on account of syphilis. Then again, Claudius Pulcher's death was attributed to a disease resulting from sexual relations with a courtesan:—"*Perdito amore meretricis infamis erubescendo morbi genere consumptus fuit*." None of this was conclusive, though, and showed that if there was any truth in it that this disease and its treatment was not known very early in Europe, and if brought here it was following Julius Caesar's and Augustus' Eastern and African campaigns, but it had no spread. It was only at the end of the fifteenth century that we get an accurate description of it. Called at different times *le mal Français* from the campaigns of France through Italy in 1497; also *le mal Napolitain* by the Italians, and also with possibly greater degree of truth *le mal Americain*, as it showed in a great spread in Italy, two or three years after Columbus had returned from the Western world. Even in this there are some contradictory evidences. Still,

it is true that at that time this disease spread all through Europe, apparently starting from Naples and a few Italian towns. Voltaire wrote, regarding the expedition of Charles VIII. in Italy, the following quatrain:

*"Quand les Français à tête folle
Sè allèrent dans l'Italie,
Ils gagnèrent à l'étourdie
Et Gêne et Naple et la vérole;
Puis il furent chassés par tout,
Et Gêne et Naple on leur ota;
Mais ils ne perdirent pas tout,
Car la vérole leur resta."*

The actual origin of this disease is still uncertain, because even the belief that it originated from America is really based on the coincidence of Columbus' voyages at that time. The Indians of America were an unusually healthy, robust set of men, and further, the Spanish and Italian ports which Columbus and his companions visited after their return were not the ones first visited by the disease; on the contrary, it was rather the interior towns. At any rate, as early as we gain exact knowledge of the disease itself, we also get a description of the use of the method of mercurial administration by the external method. An awful abuse was made of it, as it quickly fell into the hands of nostrum givers and charlatans. The rule was to use it after a long and rigid diet, after a period of diuretics and purgatives, after a thorough depuration, overheating and vaporization, then the drug was rubbed in when the system was completely exhausted and depleted, and it was always pushed to the point of salivation. Francastor describes it so vividly: "*Liquefacta mali excrementa videbis assidue sputo immundo fluitare per ora, et largum ante pedes tibi mirabere flumen.*" Boerhaave tells us, also, that a severe case needed 100 lbs., inside of thirty days, before the salivation was considered effective. The celebrated Plaster de Vigo, made up of some mercury and twenty-three other ingredients, was the rage at that time, and it was dangerous to use mercury unless it had some sort of corrective which would, it was believed, make the salivation less dangerous but more effective. The

Plaster de Vigo's correctives were oil of chamomile, oil of lily, oil of saffron, pig's fat, calf's fat, oil of laurel berries, viper's fat, six living frogs, earth worms washed in wine. It was only in the beginning of the 18th century that some of their abuses and superstitions were set aside, and it was left to Ricord in the last century to first intelligently recommend proper rules for applying the inunction.

I will not attempt to go into the chemical or therapeutic action of the drug and its mode of action, either by absorption, volatilization or, as some believe, by inhalation; still there is no doubt of its skin absorption for the following reasons: (*a*-) The skin of a subject who has died while undergoing mercurial inunctions has always been found saturated with it; (*b*-) also the urine of the subject; (*c*-) the physiological phenomena which could only be produced by mercury, stomatitis, salivation, added to this the effect on gold jewelry worn at an entirely different portion of the body than the one treated.

The advantage of the use of mercury by inunction is purely one gained by practice and the familiarity of the exact *modus operandi*, and this is the last suggestion I want to advance to you today, for undoubtedly it is the observance of some rigid line of administration and by the observance, also, of certain hygienic rules that you can get the best results. Fournier, Taylor and others are afraid of the indiscriminate and massive administration of the inunction method, on account of, first, the dirty and repugnant method itself, and the difficulty to continue its administration from purely cosmetic and social considerations. Secondly, on account of the medical danger of causing diarrhea, mercurial dermatitis, and last but not most serious, stomatitis. In spite of such high authority I am convinced, through the observations I made at Hot Springs, also from statements made to me by Dr. Greenway, who has treated 2,800 cases by this method, and what I heard in Europe, of the experience at Aix and at Uriage, and also from a fairly large number of cases in my own practice, that with the following hygienic precautions we have the ideal treatment in the secondary and tertiary form, as well as in the cerebral and aggravated types.

Modus operandi: Before beginning rubbings, examine the mouth and teeth carefully; insist on the perfect hygiene of the teeth, brushing and cleaning the sordes from their buccal bases—if necessary refer the patient to a competent dentist. Order some bland alkaline, antiseptic mouth wash or dentifrice, such as glyco-thymolin, powdered charcoal, or lime, or magnesia water. According to the severity of the case or the tolerance of the patient, use parafin or oil-silk paper divisions of 5i to 5ii, of mercurial ointment (Ungt. hydrargyri) which is a compound of 50% of mercury and lanolin. It is always best to have the druggist divide the doses to be used in exact amounts, and never use it in bulk. When ready to use it, wash the surface with warm water and then rub the quantity of salve in the skin with your own fingers. When it is done by a professional rubber, or a third person or nurse, have them to use rubber gloves always. Rub slowly over a surface of about ten to twelve inches of skin, avoiding hairy regions as in axilla and around scrotum, on account of dermatitis and salivation.

The surfaces or regions of predilection are: On the first day of treatment, the left side of the left breast downwards to the loins where the hair is scanty. The second day in the same region on the right side, and generally you can limit the surface chosen to these two parts when you are careful in your technic, but if the tissue becomes irritated, then the third day use the anterior and inner surface of the right thigh and the fourth day the left thigh,—and in rotation all over again for five to ten weeks. The part to be rubbed must be well washed with luke-warm water first, the salve rubbed in slowly with a circular motion, taking from ten to twenty minutes; if the treatment is used on the thorax, put on a plain new undershirt with night gown over it; next morning wash off whatever portion of the salve may not have been absorbed or has not adhered to the undershirt and dust the skin with any soft refreshing powder. Next night the same procedure using the same undershirt which has been hung away or hidden without washing until this has been done for a varying period of from five to ten weeks, according to the necessity or tolerance. This undershirt, in course of a few weeks, becomes charged with mercury and helps to add some

mercurial absorption to the side which has not been rubbed, and finally serves as a *Camisole* or *Chemise de Force* as it were. If the rubbing, on account of fear of dermatitis, or hairy condition of the individual, has to be made on the back also, or on the thighs, then an ordinary soft towel is bandaged to the legs over again every night, and the same pair of pajamas are used for the whole period of time.

It is needless to suggest an *auto da fe* of the material used after the completion of the treatment. This method is the only safe one, and if followed rigidly it will never cause trouble. The following morning, if possible, take a whole body bath. The other hygienic precautions to follow and observe I have already touched upon in a previous note.

After many years of this method, during which time I have used it in a good many cases, though I have had some salivation, I have never had any case of severe stomatitis or gangrenous gingivitis.

DISCUSSION.

DR. NELKEN thought that our knowledge of the cause and scientific treatment of syphilis was still rudimentary.

The generally accepted theory in the treatment had been that we should administer mercury, not with the idea of destroying the specific organism, but to eliminate the toxins or morbid products of this organism as they were formed, and to continue the treatment until such time as the animal economy was able to produce an antitoxin sufficiently powerful to destroy the germ of the disease.

But the discovery of *Spirochete pallida* and the great probability that this organism is the specific cause of syphilis is bound to revolutionize our ideas on the subject. The spirochete has been demonstrated repeatedly in the lesion of so-called tertiary syphilis, a phase of the trouble which has hitherto been declared non-infectious.

He did not believe that syphilis could be described as a benign disease. It is frequently malignant, and some of the recognized German authorities were leaning to the view that it may be incurable.

No one line of medication can be laid out for every case, and as with other diseases, treatment must consider the patient. Some

do well on internal treatment, others need inunctions, while still others do best with hypodermic medication.

The speaker thought it an error to make a practice of treating syphilis with only the primary sore for diagnosis.

Cases are constantly arising where no man, no matter how expert, can be absolutely sure of the primary lesion, and for his own sake, and in order to convince the patient, we should make it a rule to wait for the secondaries.

Certainly, if the spirochete is accepted as the cause of syphilis, its presence makes the diagnosis at once.

As to Hot Springs, he believed that the alleged virtues of its waters were something of a fetish. We would get the same results at home if we got the same assistance from our patients, used as much mercury and sweated it out as vigorously as is done at the Springs.

DR. C. MENVILLE stated that this was a subject of interest to every physician as they all come in contact with it, no matter how short in practice and no matter how far in the country. He also stated that little we knew of our internal powers to resist and combat disease, and could not the self limited diseases be called such because of the curtailment due largely to those internal influences incipient of leucocytes which could bring about a radical cure without taking a dose of medicine? He saw a case of indurated chancre with secondary manifestations refuse all medication, and 22 years afterwards the same party redeveloped a new indurated chancre. Was this a self limited syphilis?

DR. GREMILLION believed it was more and more admitted that mercury is a specific for syphilis, and that it was all a question of getting it into the system. Some could take it internally while others could not, and it should be given them hypodermically. He believed a mistake was made in sending patients to Hot Springs. They would go there and come back in six weeks thinking themselves cured. He thought they ought to go back every year. One case he recalled had died due to being taught that a six weeks' course of inunction treatment at Hot Springs had cured him. He did not agree as to the treatment before the secondary stage de-

veloped. It was necessary, if the treatment were to be successful, to have the co-operation of the patient, and the patient must understand that he must remain under treatment for several years. Replying to Dr. Menville, the speaker stated that a diagnosis could not be made from an initial lesion. It had been his misfortune to tell patients they did not have syphilis when they did have multiple lesions. Syphilis and chancroid might come together.

DR. KIMBELL, speaking of the curability of syphilis, stated that in 1888 he had treated a mulatto carpenter for primary syphilis. Within a short time secondary syphilis developed, and the man had a full fledged case. He was put on protiodide of mercury as the main treatment. The symptoms subsided and he seemed to get well. The patient was directed to take a blood purifier, mixed treatment, which he thought was done at intervals for three years. In 1897, however, the patient came back with another initial sore, and in the proper time developed the secondary stage again.

DR. GESSNER stated that of greatest interest to him in this discussion was the question as to the time the treatment should begin, and he hoped Dr. LeBeuf would touch on that. He knew it was the belief of many that the treatment should not be commenced until the secondary signs had developed, the reason being that it was difficult to make a differential diagnosis between chancroid and chancre. He did not think that those patients having typical chancres should be deprived of the benefit of early treatment. As to the difficulty of convincing the patient of the character of his disease, he did not know of any other condition in which the patient had to make his own diagnosis. Patients submit to treatment for gonorrhea, typhoid, or anything else on the physician's diagnosis, and he could not see why an exception should be made here. He thought it an error to let any man go untreated with a clean cut chancre.

DR. WEIS believed there had been enough evidence to show that this condition was really caused by the *Spirochete pallida*. Metchnikoff had been able to transfer it from monkey to monkey. The Doctor had been able to make the diagnosis by simply curetting the chancre and examining the cloudy serum which oozes from sur-

face. Where the spirochete was present, he thought there was no reason why the treatment should not be at once instituted.

DR. PARKER had been greatly interested in the paper, because the method of inunction was that generally used at Hot Springs, where more syphilis was seen than probably any other place of its size in the world. The great point in the treatment was to look after the secretions and excretions, to keep the bowels, skin and kidneys in the best condition possible. The statements with regard to the care of the teeth were especially indorsed, with the statement that if the teeth were kept in good condition the patients would stand mercury better than otherwise. The practice he had followed was to rub the mercury in the back, starting with eighths (eight to the ounce) and a rubber glove was used for this purpose. When especially rapid action was desired, fourths were used; the results were quicker, and in some respects more satisfactory. The hypodermic injection of mercury was not recommended by the speaker, he mentioning one case where two injections had been made into the buttocks, resulting in two sloughs large enough to put a fist into. This case was seen in consultation. After the disease had progressed to the tertiary stage, potash became an important factor in the treatment. Cases involving the brain were not considered hopeless by any means, one case being mentioned where it seemed the patient was going to become paralyzed and could not remember anything. He was gradually brought up to 150 drops of the iodid and on up to 300 three times a day, and recovered. He did not believe in starting constitutional treatment in the primary stage and spoke of the bad effects of tobacco and alcohol in any form during the active stages. If the secretions and excretions are looked after large doses of iodid and mercury are well tolerated.

DR. A. J. PERKINS stated that the subject was a matter of great interest; that there was more syphilis in his town than formerly. He had treated syphilis for a good many years and had paid special attention to it. None of his cases had required the quick action of mercury or inunction. However, he did not believe mercury and the iodids could be gotten along without. While this was true, a great deal of attention should be given the matter of hygi-

ene, as hygiene, exercise and diet had a great deal to do with the success of any treatment. Regarding the reputation of the Hot Springs waters, he had sometimes doubted their efficacy, believing that the same amount of water used at home would accomplish the same results. In one respect the Hot Springs treatment was believed to be unfortunate. Patients would go there and be quickly boiled out and the patient would go home with the fixed idea that he was cured for the balance of his life, while that was not true. The home treatment took longer, but the patient was impressed with the fact that he must come around once in a while. The home treatment was declared to give better results and to be productive of less bad results in the long run. The patient could be kept under observation, and if any bad conditions developed, proper steps could be taken and the needed treatment given.

DR. DUPAQUIER called attention to the teaching of the American authority, Geo. Henry Fox of New York, that syphilis is over-treated because it is wrongly considered as a "voracious and terrible demon," in all cases.

These ideas, as expressed in the paper, are of long ago, possibly the middle ages. While syphilis is certainly a serious infection, it is a self-limited disease like other infections. Fournier himself, has modified his "rules" and condemns now the intensive treatment as a routine. The fundamental principle in treatment is hygienic, chiefly the alimentary hygiene, and, with this, the judicious administration of mercury in each individual case.

The hypodermic and inunction treatments while of great service in some cases, can not be indorsed for every day practice.

He agreed with Dr. Parker that the physicians in Hot Springs saw more cases than other physicians; they had so much, and others did not get much, chance to see it, hardly. But, he believed it could be treated at home, just as well.

A case was mentioned, referred to Dr. Bruns, last summer, where there was involvement of the eye which could not be relieved by glasses, but careful hygiene, first of all, and a little mercury and iodid have resulted in relief of the eye symptoms, promptly.

Another case was presented coming to the doctor with a history

of Jacksonian epilepsy and besides a gumma of the left tibia. But, it was finally diagnosed as a case of epilepsy and of syphilis, which were disconnected. Difficulty developed in the treatment, because when the iodid treatment was pushed epileptic attacks increased in frequency, so that it was necessary to stop the treatment of syphilis, and treat the epilepsy. Proper hygienic treatment with moderate specific drugs had resulted in improvement.

DR. LEBEUF (closing the discussion) said he felt he owed the Society an apology for not having been able to abstract his paper, as he had only been able to read about one-fifth of it. He thought Drs. Parker and Martin of Hot Springs were perhaps correct in what they said about many things. He knew of the absolute faith of many of the men practicing at Hot Springs. Dr. Greenway, who had seen over twenty-eight thousand cases of syphilis had, in his presence, sent a man away from there to the Springs in Tennessee, telling him he had no syphilis, and did not need any treatment there. He thought the men there should be given credit for honesty. As to the *Spirochete pallida*, he thought it was too soon to accept that as the causative agent. He did not think that the experiments on a few monkeys and on one human being subject make a dogma, and these were only to be regarded as experiments. All these points were gone over in the paper. He did not believe in the inunction treatment to the entire exclusion of any other, but thought the treatment should be used that would give best results. One of his patients had received injections; Dr. Fournier in Paris had made many, as well as other physicians in Berlin, London and elsewhere. In the case referred to over 100 hypodermic treatments had been given with negative results, but in other cases splendid results had been obtained. Several hundred injections had been made by him without any bad results in a single case, and he believed it to be a question of *modus operandi*. As to the remarks of Dr. Dupaquier that syphilis was not so serious a matter, the speaker took issue, and stated that he thought it a very serious matter when a child would be delivered from a woman in such a condition that its skin would peel off, that its mind was affected and that the generations to follow were to carry their share of the burden.

DR. EDWARD H. MARTIN, a guest of the Society, stated that he had nothing to add on the subject of the treatment of syphilis, but wanted to stand up in defense of Hot Springs, as it had been intimated by some of the speakers that it was not much of a place anyway, and that the water was just hot water. That the water is not merely hot water would be shown when he read his paper on the program on the *Waters of Hot Springs*.

Even if the baths had no specific effect indirectly, by raising the hemoglobin percentage and by increasing elimination so as to permit larger amounts of mercury and the iodids to be used, the instruction as to the necessity for continuous treatment was worth the trip to Hot Springs. It was often difficult to get the patient at home to take treatment with the needed persistency, while when he went to Hot Springs and was staying there at a large expense, he would take the treatment, and get an education at the same time, as they talked about syphilis, heard about it and saw it on every hand.

It had been stated in this discussion that great harm had been done by some Hot Springs doctors in their having led patients to believe that syphilis could be cured at that place in a few weeks, on the contrary if there was one thing that was impressed on the patient leaving there it was that he must come back! Without joking, no man of ordinary intelligence could stay around a bath house in Hot Springs for three or four weeks and fail to learn the natural history of syphilis, it was a matter of common knowledge among patients and attendants that treatment must be continued after leaving Hot Springs and that for years. No reputable physician ever told a patient that he could "cure" syphilis in a few weeks and the place should not be blamed for the actions of a disreputable physician. There were nearly one hundred and fifty practicing physicians at Hot Springs and the greater part reputable, ethical men. It was the custom of the best class of physicians there to always send the patient back to the physician who had been treating him at home, whether he had been referred by that physician or not. The patient was impressed that he could not call himself well for at least four years. Cases having old lesions, nervous lesions, and bone lesions were found to do better there than under

home treatment. Another point referred to was that of the differential diagnosis of the initial lesion. Many young men had come to him with chancreoids. Undoubtedly, he stated, there were cases of mixed infection. It was wrong to tell any man that he did not have syphilis when there was a sore on his penis. If the period of incubation and the number of lesions indicated soft chancre the physician should say so, but should also add that any woman who could give a man a chancreoid would also probably have syphilis and that it was always possible to contract both diseases at the same time. The physician should say that he does not know, and the case should be kept under observation, and the secondary symptoms watched for before he should make a final diagnosis. But when the single lesion, the long period of incubation, the lymphatic enlargement all showed positively that a patient had a hard chancre when should treatment begin? The profession almost to a man said to wait for the secondaries. This seemed a very unjust thing. Treatment at that early stage is most valuable and the question should be reconsidered. "Put yourself in his place" and you would not wait. It seemed foolish to humor a patient by making him wait "just to show him" a sore mouth or sore throat. No other disease is so handled. If you tell a patient who has confidence in you that he has syphilis he will not ask to be shown.

Orleans Parish Medical Society Proceedings.

President, DR. JOHN J. ARCHINARD. *Secretary*, DR. AMEDEE GRANGER.
141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. AMEDEE GRANGER, *Chairman*.
DR. HOMER J. DUPUY and DR. E. O. TRAHAN.

MEETING OF JUNE 8, 1907.

DR. C. MILO BRADY read a paper entitled

General Arterio-Sclerosis.

In this paper I lay stress upon the pre-eminent importance of a due consideration of general arteriosclerosis in the various types of

diseases resulting directly from this malady. These abnormal changes in the vessel walls long since attracted the attention of such investigators as Senac, 1682-1770; Morgagni, 1693-1770; Lobstein, 1770-1835, and the great pathologist Rokitansky who especially studied this disease as long ago as 1846, and laid down as a fact what is now the accepted opinion as to the nature and causes of this inflammatory process and degeneration. Arterio-sclerosis is frequently overlooked in the diagnosis and treatment of the general condition. These I shall mention in order as they occur in various parts of the body, and classify them as of cerebro-spinal, thoracic and abdominal types.

General arteriosclerosis is an extremely chronic inflammatory process, affecting the muscular walls of arteries of various sizes, and occasionally those of the veins. It causes thickening of the coats of the vessels with resulting diminution in the blood supply to practically every tissue in the body. When this interference with the circulation, usually more marked in one region than another, becomes pronounced there is set up as a result a train of associated morbid phenomena the tendency of which is to grow progressively worse. It is undisputed that the condition is principally due to alteration in blood pressure in the form of long continued high tension brought about by toxins present in the blood stream. These toxins, however diverse the cause, produce first a stimulating, irritating and then paralyzing effect upon the vaso-motor center in the medulla and the great ganglia of the splanchnic system. The first result of this is a dilatation of the arteries, slowing of the blood stream, and a low tension pulse, followed by fatty degeneration of the muscular and elastic fibres of the media with absorption of both. Klotz of Montreal has produced artificially the same degeneration of the middle coat, which occurs in disease, by the use of adrenalin, digitalin, nicotin and barium-chloride. He has observed microscopically both the muscular and elastic fibres become fatty and then disappear according to the increasing degree of the intoxication. Other physiological experiments show that mental and physical strain raise blood pressure proportionately, which falls with the removal of the causes, and it is thought if these

strains are too long continued, excessive and incomplete autolysis follows with attendant deleterious results.

With the gradual degeneration of these fibres by disease the organism attempts to preserve the physiological normal by a compensatory process. The means which nature always employs in repairing injuries where tissue is lost, namely by replacing the diseased tissue by some of lower grade. This is done by the proliferation of low grade connective tissue between the weakened media and the intima at the most suitable situation to take on the strain. This compensatory process is continuous and when the new growth around the intima begins to fail the adventitia takes on the strain in the same way, resulting finally in an artery almost devoid of muscular and elastic fibres, but composed chiefly of connective or scar tissue with its well known contractile tendency. This low grade tissue in the intima is less able to stand the high tension and soon small necrotic spots appear along the walls of various arteries. Nature again attempts to heal these ulcers with lower grade material by the same method, which she employs in diseases of the lungs and heart, that is by replacing each ulcer with a calcareous deposit. These areas of necrosis continue to increase from year to year with their cures, till eventually there is produced a state of atheromatous or calcareous degeneration in many arteries. There are two causes for the production of a high tension pulse, the irritating effect on the nerve centers of the toxins circulating in the blood streams and the narrowed channel for the current due to overgrowth of connective tissue.

The classifications of arteriosclerosis have been various. In my opinion the one of most practical value is made by following the natural course of the disease, namely—the primary or sclerotic type of a contractile tendency, which does not spread as a rule beyond the small arteries and the secondary, nodular, atheromatous or dilating type, which is more often found in the large vessels.

The causes of arteriosclerosis are Protean, viz.: Heredity, mental and physical overstrain, overfeeding, alcoholism, nephritis, gout, diabetes and defective metabolism. Tuberculosis, malaria, syphilis, long continued suppuration, chronic lead poisoning, chronic

diseases of any nature and especially constipation. Certain families are well known whose members usually die before 50 and 60 with such diseases as pneumonia, apoplexy, nephritis and endocarditis. One authority says in the make up of the machine, poor material which is used for the tubing, that longevity is simply a question of the vascular system.

A Russian investigator has shown that blood pressure was always highest in peasants in summer time when working than in winter when they were idle. Vital statistics show that day laborers wear out early. Alcoholism and overfeeding are two prominent factors in this disease. Syphilis it is stated is the direct cause of one-fifth of all pathological scleroses.

The relationship between tuberculosis and arterio-sclerosis is most intimate. Tubercular patients with normal, undersized hearts are frequently seen accompanied by arteriosclerosis despite the extra work thrown on both ventricles.

On account of the absorption of toxins chronic constipation becomes a factor of first importance. Indeed, according to Metchnikoff, the arteriosclerosis of senility is largely due to this cause, in that man has inherited from his mammalian ancestors an enormous colon at the expense of his longevity. This organ harbors an immense number of bacteria leading to putrefaction and fermentation; while vitality is strong and the organs of elimination are functioning perfectly no damage is done, but when these processes begin to fail progressive autointoxication makes its appearance.

Chronic interstitial nephritis is so common an accompaniment of arteriosclerosis that it is a mooted point in some instances as to whether the sclerosis results from the nephritis or the reverse. Be that as it may the two conditions are concurrent, each directly and pathologically influencing the other. The increasing amount of toxins that is left in the blood causes more irritation of the splanchnic and vaso-motor nerves, higher blood tension, overfilled arteries and progressive sclerosis. In the train there follow hypertrophy in the left ventricle, increasing damage to the myocardium, dilation of the left ventricles, relative regulations and on in the vicious circle until death occurs in the form of cardiac failure, apoplexy, nephritis, aneurism or some acute infectious diseases.

Arteriosclerosis, both the so-called physiological or senile and the pathological is the most common disease that attacks the human body. It may be found in the arteries of children of almost any age above infancy. S. reports a condition of general arteriosclerosis in a child of 11 years, and I have myself repeatedly detected it in negroes under 12 years of either sex and have thought that it is most often found in children with a tubercular history.

It is a well known fact that the progressive loss of weight so common in persons beyond middle age is due to senile arteriosclerosis and that weight is usually regained in direct proportion to the increased blood supply to the parts. Many symptoms are classified under the head of a cerebral type, paresthesias or trophic disorders in the senile or prematurely aged, a progressive loss of cerebral function, memory, hearing, dullness of taste, faintness, vertigo, headache, temporary or permanent loss of motor functions, apoplexy, epilepsy beginning in the middle age. Finally a complete obliteration of the arteries of the cortex with all the mental symptoms that go to make up a picture of dementia senilis. However, this is disputed and the claim made that it is due to localized disease of the heart itself.

Charcot says sclerosis in the vessels of the medulla account for the disease called by the joint names of Stokes-Adam's, one of the symptoms of which is a slowing of the pulse possibly the inhibitory action of the pneumogastric nerve. The sclerosed arteries of the spinal cord help in producing certain forms of spinal diseases. The heart and the large vessels are the chief seats of the lesions of sclerosis in the thorax. Atheromatous or calcareous deposits are found on all the valves, but more specifically on the aortic, traveling down the aorta. The common dilatation of the aorta due to nodular sclerosis produces a blowing sound often mistaken for a stenosis of the aortic valves.

Sclerosis of the coronary arteries diminish the blood supply to the heart muscle and cause angina pectoris or combined with the interstitial nephritis or bacterial diseases aid in bringing about a fatty degeneration of the myocardium, dilatation of the ventricles rupture of compensation difficult to restore once the heart muscle has failed.

The failure of the heart reacts upon the lungs, the bronchial arteries are insufficiently filled; too little blood is sent to the parenchyma for oxygenation, and as a result interstitial tissue proliferations occur in the lungs and materially aid in the causation of interstitial pneumonia, chronic bronchitis, fibroid phthisis and emphysema. In the abdominal organs in addition to interstitial nephritis already mentioned the arteries and even the veins are frequently sclerosed in the liver, spleen, stomach, pancreas and intestines. Obscure abdominal pains at times result from arteriosclerosis of one of these viscera and are sometimes mistaken for a crisis of tabes dorsalis or the like. Any interference with the blood supply to abdominal organs produces symptoms that may be mistaken for less serious troubles.

The diagnosis of arteriosclerosis is easily made if the superficial arteries are readily rolled under the finger and the pulse of a small, wiry character, obliterated with more or less difficulty varying with the amount of blood tension and the degree of sclerosis. In a large majority of instances the left ventricle is found to be hypertrophied with a booming first sound and an accentuated aortic second sound. In a minority of cases no hypertrophy of the left ventricle can be discovered through other indications of sclerosis are elicited. This condition is often seen in tuberculosis, but when that disease cannot be made out it sometimes is thought by good clinicians that the sclerosis has attacked the heart muscles to such an extent that the scar tissues clasp the heart and prevent the normal hypertrophy from taking place. When this occurs the prognosis is of greater gravity and dilation soon follows.

As the sclerosis increases gradually appear progressive emaciation, pallor of surface, obscure pains, abdominal disorders and evidences of renal or cardiac failure.

During the past year I have had the opportunity of palpating the radial artery of something over 1,000 presumably healthy individuals of both races and sexes of the laboring classes, and have below tabulated the average age of the appearance of sclerosis, if any.

In Race and Sex:—Personal equation will necessary exert con-

siderable influence on what should be designated a certain degree of sclerosis.

NONE	SLIGHT	MODERATE	MARKED	
White: 23	33	47	0	Males
36	45	55	0	Females
Colored: 20	23	40	45	Males
24	31½	40	60	Females

These statistics clearly show that sclerosis appears in the radial artery of the negro about 10 years earlier than in the white with a larger percentage of marked sclerosis at the same ages. Some years ago when examining a number of federal soldiers whose average ranged between 55 and 65 I in no instance found traces of arcus senilis or sclerosis of the retinal artery among the white soldiers while the same condition usually well marked was found in 95 per cent of the negroes.

The rational treatment of arteriosclerosis resolves itself into the reduction of blood pressure and is directed with the purpose of checking connective tissue growth and increasing the vascularity of the parts. When the disease is of long standing this is decidedly unsatisfactory, but should be carried out systematically, always keeping in view the apparent chief contributing cause.

In this use is made of elimination by the various emunctories, hydro-theraphy, suitable diet and exercise and drug treatment; unquestionably all causes that tend to raise should be avoided, mental and physical strain, smoking, venery, overeating and drinking. The diet consists of one non-irritating and bland in character. In this connection due care should be taken in the selection of proper cases for the employment of the various mineral waters in the so-called flushing of the kidneys. Individuals who suffer from arteriosclerosis with the secondary renal involvement of chronic interstitial nephritis who have urine of pale color, and a low specific gravity without renal detritus usually do badly when this is attempted. The overworked heart is already laboring to keep up the circulation and when this excess of fluid is poured into the arteries, blood pressure is raised and there is always the danger of rupture of an artery, a dilatation of the left ventricle with broken com-

pensation. All digestive disorders should be corrected, an abnormal amount of indican in the urine is warning for the use of intestinal antiseptics, colonic irrigation and the careful regulation of the diet, till it diminishes or disappear. Moderate exercise in the open air is indicated with regular diet and freedom from labor, mental or physical. A patient should be sent out of range of a telephone or telegraph; sea-voyages of long duration are especially beneficial.

Milk-warm baths are very serviceable in lowering blood pressure and is one of the best methods of treating the disease.

Lastly the medical treatment, the vaso-motor dilator, nitroglycerin, nitrate of soda for a speedy action and the iodides for a more lasting impression. It is with drugs that the underlying primary causes can be best benefited.

Many of these observations have been made in the clinic of Dr. Otto Lerch with which I have been associated for the last several years.

DISCUSSION.

DR. ALLEN: I would ask Dr. Brady if he has ever seen a case treated by phosphoric acid, or know of its being used to retard the progress of the atheroma?

DR. A. McSHANE said he was particularly interested in the phase of arteriosclerosis that had to do with albuminuria. There is at first a proliferation and degeneration of the tunica media of the arteries, followed by the deposition of lime salts. This calcareous degeneration or infiltration is a conservative effort on the part of nature; but the replacement of soft elastic tissues with mineral matter does not operate to the benefit of the patient. Dr. McShane has known of cases in which the liberal use of carbonated water (Seltzer) has relieved the manifestations of arteriosclerosis; and in one case of angina pectoris there could hardly have been any doubt of the beneficial action of the carbonic acid. This gas is a powerful solvent of lime salts, and it is not amiss to ask if some part, at least, of the benefits derived from celebrated health resorts is not really due to the carbonic acid contained in the mineral waters. If such be the case, then there is much hope for the poorer class of victims

of arteri-sclerosis, who cannot afford to spend a season at some foreign sanatorium.

In regard to albuminuria and Bright's disease, Dr. McShane wishes to direct attention to the causation thereof, and the most certain means of preventing and curing the same. The albumen that appears in the urine is a demineralized serum-albumen that has become exosmotic through the poverty of the blood in mineral salts, particularly phosphate of lime. Dr. McShane has, since 1883, used Dr. Hava's preparations, made and originated in New Orleans, but for that very reason, perhaps, they do not enjoy the popularity that they so well deserve. He referred especially to Dr. Hava's Solution of Bromo-Phosphate of Lime and Potash, which comes as near being a specific for Bright's disease as any remedy well can be. Repeated use of this valuable remedy only serves to confirm the claim made for it that it is the one *par excellence* for Bright's disease, acute or chronic. It does not reflect credit upon the discriminating powers of the profession of New Orleans, that this preparation is slighted for widely advertised compounds from some other localities. There are some men who imagine that no good thing can come out of Nazareth. Dr. McShane is not of that ilk; and he wishes emphatically to call attention to the indisputable merits of a remedy that is struggling under the disadvantage of being a product of local intelligence, and which would doubtless be eagerly taken up by the profession if it only bore some foreign label.

DR. J. F. OECHSNER read a paper entitled

The Short Plaster Spica in the Treatment of Hip-joint Disease.

The perusal of the literature on the local treatment of hip-joint disease would prove disappointing to any one in search of a uniform and well-established method, did he not have some opportunity for practical observation and experience. Conflicting and antagonistic opinions as to the best method of mechanical treatment by those in authority to speak, have existed from the time of the earliest recognition of the disease, and its mechanical treat-

ment to the present day. It is thus we have the English method of fixation and the American method by traction. Probably two of the most recent articles by exponents of different methods and high in authority on orthopedic work, are those of Lorenz and Bradford, and from which articles I shall take the liberty liberally to quote. Lorenz, before the Association of American Surgeons of Vienna (*Journal of the A. M. A., February, 1905*), calls attention, in an effort at imitation of Nature in her process of repair, to cases that have never been treated mechanically. He says: "These cases always find their way to the physician in the end, oftener after the disease has as good as run its course. What is it that impels the patient, or his parents, to seek the physician? It is the contraction deformity, as a rule, the flexion-abduction contraction, the shortened leg that becomes troublesome, on account of the impediment to the gait. I must openly admit that to me such patients are not only the most interesting, but the most desirable. They cause neither worry nor difficulty; they suffer no pain; their treatment is perfectly simple, lasts but a short time, and is usually followed by excellent results."

Taking an illustrative case of extension or traction treatment, he says, after speaking of a *fairly* good result:

"Now let us look at the leg itself and we will find it very much emaciated, the muscles flabby and without power, the knee-joint has become lax under the long-continued influence of extension. The whole leg appears as a loose, wobbling appendage of the trunk. Experience shows that the bones of such a leg are brittle and fragile. If we investigate the independent function of such a leg, there is shown an absolute inability to support, unaided, the weight of the body, even for a moment. Absolute functional restraint, continued for many years, is bound to be avenged and does the limb more harm than the disease of the hip-joint itself."

He calls the mechanical treatment by traction an over-treatment.

"From my observation of Nature," continues Dr. Lorenz, "I have formed my own mechanical treatment. This observation shows that the diseased joint is sensitive to weight-bearing for only a short period of time. Observation shows further that the diseased hip-joint is extraordinarily sensitive to motion for nearly the entire duration of the disease. Every case not treated me-

chanically offers evidence of this assertion. Seeing that the bones constituting the hip-joint have usually undergone anatomic changes, and that the muscles about the joint are usually inefficient and powerless to properly support the infected joint, it is my opinion that the goal to be striven for in the treatment of coxitis is the position of *indifferent extension* with as much rigidity in the joint as possible. In other words, the ankylosis of the hip in the indifferent positions." Acting upon this suggestion of Nature, as it were, Lorenz has elaborated the short plaster spica on a method of fixation; preventing freedom of movement of the rest of the limb.

Bradford, the champion of traction, in an article in the *Transactions of the American Orthopedic Association*, January, 1906, says:

"The force which presses the head of the femur upward is evidently muscular and varies according to the extent of the reflex muscular contraction, which in a measure corresponds to the activity of the disease. This contraction is seen in the spasm which develops *night-cries*, characteristic of early hip disease, in which the head of the femur is driven back into the socket with a force which has been described by an adult patient who has suffered from this symptom, as like a severe blow of a sledge hammer. The object of traction is two-fold: First, to overcome the exaggerated contraction of the muscles about the hip; second, to separate, if possible, the two inflamed portions of bone, by a pulling force, in order that the possibility of injury by the bruising caused by the forcible contact of these bones, may be removed. In the light of our knowledge of surgery, it is not sufficient to be satisfied with the cure of hip disease with a shortened, distorted, ankylosed limb; these results may be the best that can be obtained in neglected cases, but given proper care of a case under reasonable conditions, the surgeon, barring intercurrent disease, should expect a cure without the establishment of any enlargement of the acetabulum or destruction of the head and consequent shortening, without distortion of the limb, and the restoration of normal functional activity with but slight, if any, limp in gait."

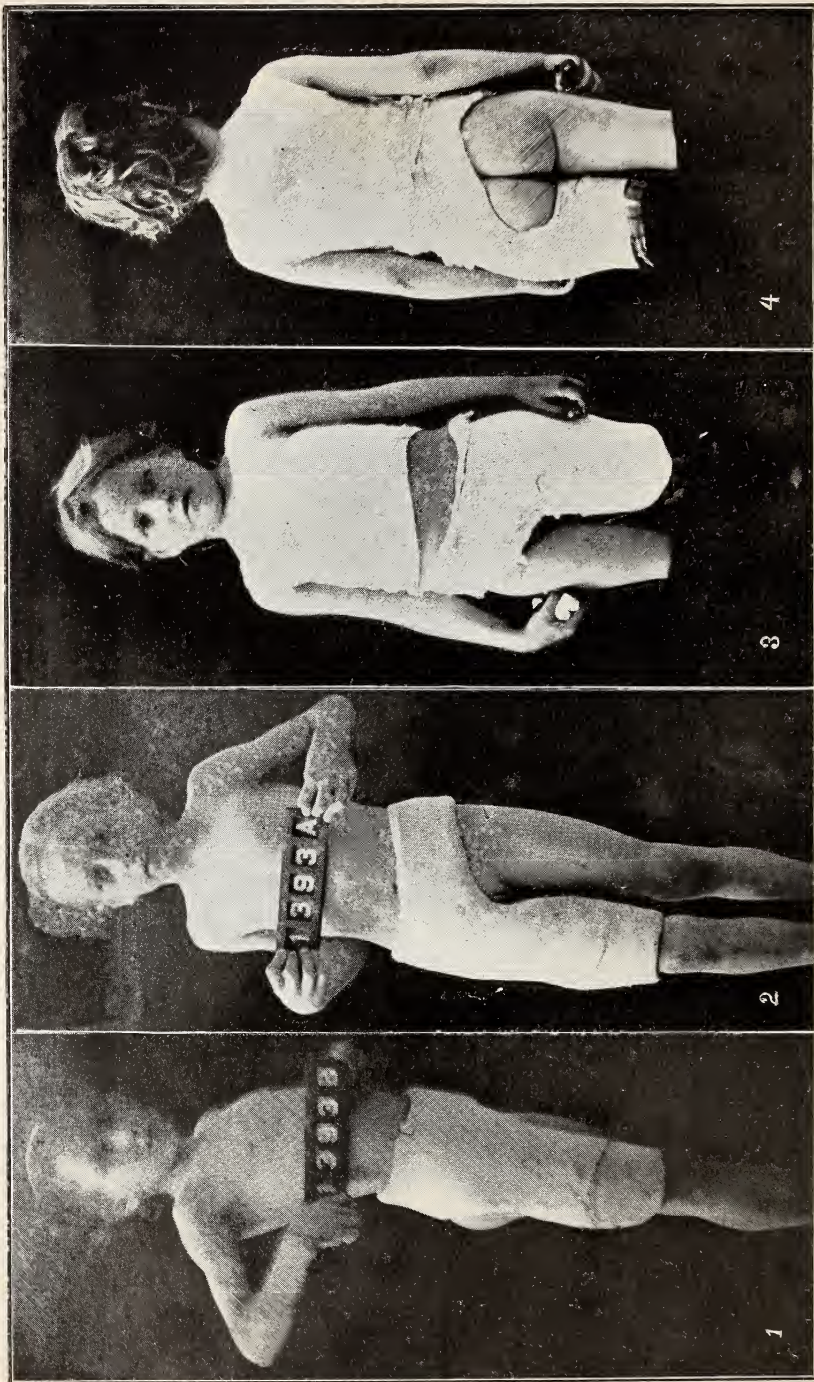
The contrary opinions of two men so high in authority, permit

of criticism, and at the same time of a certain reconciliation. The trouble has been that in the past mechanical treatment has often predicted on a supposed specific and definite course of the disease; that is, as regards time, progress in the pathologic lesion, etc. That this is in part erroneous, is evidenced by the fact that cases of hip-joint disease run anywhere from two to ten years. We now know that many active factors operate to influence the course of the disease; the constitutional condition of the patient, environment and local blood conditions in the infected bone itself. I refer to the opsonic content of the blood in the part.

Bone tuberculosis is as indefinite in its progress as pulmonary tuberculosis. There are probably only two tuberculous conditions, the course of which we can predict with certainty, and these are tuberculous meningitis and acute miliary tuberculosis, running to a fatal termination in two or three weeks, after the onset of observable symptoms.

Mechanical treatment is, as it were, of a passive nature; that is, it puts the affected parts in such a position as to facilitate the process of repair and prevent deformity.

Until our serum researches elaborate a specific curative agent, the treatment for the present must be, as in the past, constitutional and local. The object of mechanical treatment, as Bradford says, is the overcoming of the exaggerated spasmodic muscular contraction and the separation of the two inflamed portions of bone. This, in my opinion, can only be accomplished by continued treatment in bed, which, for obvious reasons, is out of the question. Both in methods of accepted treatment, that by traction and that by fixation, have their advantages and disadvantages, and it becomes a question which outbalances the other. The treatment by traction often fails to accomplish its object and shows more boldly its disadvantages in the atrophy of the limb, the brittle and fragile bone, in fact all the consequences of diminished nutrition as enumerated by Lorenz; moreover, the traction brace frequently gets out of order and becomes worse than useless. The short plaster spica, on the other hand, does in my experience, relieve muscular spasm, but fails to separate the inflamed bony sub-



CUT TO ILLUSTRATE DR. OEHLSNER'S ARTICLE.

stances, a disadvantage which can also frequently be charged against the traction brace. The fixation accomplished by it is as great as can be accomplished by any method save that by means of which the entire body is encased in plaster of Paris. To enumerate, therefore, the advantages of the plaster spica, we have fixation as much as can be accomplished. The child is enabled to get out in the open, and without the use of crutches, to keep up the physiologic nutrition of the limb, by appropriate exercise. We agree with Bradford that we should not be satisfied with an ankylosed joint, and maintain that in early cases the best results can be accomplished by the method advocated by Lorenz, despite his remarks that the ankylosed joint is the ultimate desideratum. In support of this contention, I beg to exhibit these two little patients. Maud R., 5 years old, has been under my care for eleven months. According to the history, the disease was first noticed four months previously. She presented all the symptoms of hip-joint disease, with a decided limp in gait, marked fixation of the joint. The plaster spica has been the only treatment and she has not been confined to bed at all. As will be noticed there is very little limp in the gait, no deformity, no atrophy and the case promises well.

Case 2 is that of a little girl who unfortunately did not come tonight. Johanna B., 9 years old, dates her disease back something over two years. She has been under our care for about two years, and at the beginning of treatment, showed marked fixation and a most decided limp in walking. Nothing but the short plaster spica has been used in her case, she has not been confined to her bed and the result, so far, save for a suspicious joint crepitus, probably due to adhesions, which may still harbor the tubercle bacillus, and for which reason fixation is continued, and the result seems to be a perfect cure.

In conclusion, I do not wish to maintain that the short plaster spica is the routine treatment appropriate in all cases under all circumstances, but is probably the best method in most cases and certainly promises excellent results in those cases in which treatment is instituted early.

DISCUSSION.

DR. LARUE: There is some difference between the two limbs. The left is longer than the right and the fold of buttock is much lower on the right side. However, the important point is that there is no atrophy. I have never seen a case as good as this. I would have been mighty glad to have such a result in a case I had several years ago. It was a very bad case. All I could do was to get the little boy out in the air on crutches, and although hot water and massage were applied I got a considerable amount of atrophy in the limb. The boy now is very well and is not prevented from gaining a livelihood, with quite a shortened limb.

DR. HATCH: I think the paper is very timely and well illustrates what can be done with a diseased hip-joint. Now as regards Dr. Lorenz, I believe it is wrong to expect to get a fixation or ankylosis in the average case, but on the other hand we are glad in some cases to get ankylosis without abscess. I believe in the first place the thing to do is to take a skiagraph of the diseased joint. I certainly believe there is a certain class of cases where traction is indicated. In many cases of adults I do not believe the doctor would advise putting on the spica. As an illustration of this, I had a case of hip-disease a few weeks ago, in which the X-ray showed the bone process to be confined to the posterior border of the acetabulum. Now other things being equal the prognosis in this case is better than one in which there is marked erosion of the head of the femur. In other words, a good X-ray picture helps us in the prognosis.

DR. JACOBY referred to one case of hip-joint disease in a primary condition, which he had had under observation. He first used traction with eight pounds to the entire body weight, and after the pain in the joint had been relieved, he put on a plaster cast from the toes upwards. He felt, however, that he could have put on a spica from the hip to the knee only. The patient was allowed to go about on crutches. After two or three months, a traction splint was put on. The entire treatment lasted one year. He saw the boy the other day and the patient reports that he has had no trouble since the removal of the splint. The finished result was normal in every particular.

DR. OECHSNER: I thank the gentlemen very much for their interesting discussion. The value of the paper rests in the amount of discussion which it provokes. Regarding Dr. Larue's statement, there may possibly be a little shortening there, but there is absolutely no atrophy. The matter of early diagnosis is important, for the earlier the diagnosis, the more promising the results under appropriate treatment. As to the point Dr. Hatch brought out, the method of treatment must depend upon the condition at the time the patient is seen—we can establish no routine method in all cases, but of the two methods the method by fixation accompanied by the short spica in my experience is much the better. Then again there are times when you cannot use the spica and the patient must be put to bed and the joint kept absolutely quiet until all inflammations has subsided, in acute exacerbations.

DR. JACOBY reported "*A Case of Tubercular Wrist*" which he had seen in the surgical clinic and ward. This case had been operated upon several times, but there still remained three sinuses. Dr. Allen took charge of the case and carried out the Bier method of treatment. The patient when last seen had only a sinus the size of a pinhole. The patient deserted the hospital before the completion of the treatment. The doctor did not think that an operation would have given the results that the Bier treatment did. He suggested that, instead of using a plaster cast on the wrist, adhesive plaster could be used.

DR. OECHSNER: By most of the tuberculous joint we mean fixation of the joint itself, with movement in the adjacent joints to maintain physiological fixation. Now this can always be done. The idea of that man working is ridiculous. I think the man should be fed on eggs and milk. The general treatment is of great importance. The constitutional treatment is too frequently neglected for the local treatment.

DR. LARUE: I have not had any experience with these methods but I have heard of some remarkable cures. Some have gotten very good results, others no results at all. I do not understand how venous blood can do good in a tubercular condition. How does it act on the tubercular focus?

N. O. Medical and Surgical Journal

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

Newspaper Falsities in Medical Matters.

It is not within the province of the *JOURNAL* to discuss the prevailing sensationalism of many daily papers, but it is proper that we call attention in the way of protest to the manner in which so frequently they wink at the truth or deliberately falsify in order to make a good story, or to attain some end in matters medical.

We have recently received a communication from Dr. S. A. Knopf, of New York, protesting against the repeated publication in various newspapers of a false statement, which originally appeared in a Philadelphia paper, notwithstanding explanations and denials which were made after the first publication. He was reported to have advised the killing of advanced consumptives quickly and painlessly by heavy doses of morphin, before the National Association for the Study and Prevention of Tuberculosis. What Dr. Knopf advocated was merely the relief of patients in the last stages. Although a denial was made through the Associated Press and statements were published from Dr. George Dock, who presided at the meeting, and from the secretary, some newspapers have continued from time to time to publish the original lie in a more or less sensational manner. Evidently the "story" was too good to miss though there was no truth in it. Dr. Knopf is naturally indignant and is anxious to correct the false impression not only for his own sake but because of the harm such publications can do in obvious ways.

Recently an equally false, although less sensational article appeared in one of our local dailies in reference to the appointment of a third medical member on the Board of Administrators of the

Charity Hospital. Every passably informed person knows that the Board is composed of eight members in addition to the Governor of the State who is *ex-officio* president. For many years there have been only two medical members, although at one time there were three. The State Medical Society and the Charity Hospital Alumni Association have both passed strong resolutions requesting the Governor to appoint again a third medical member, which would still leave the lay members five to three, outside of the Governor who rarely is present at meetings. Nothing could be simpler, fairer, and, in an essentially medical institution, wiser than such a medical representation, but the morning paper to which we refer, for reasons of its own is opposed to granting this reasonable representation to the medical profession in a medical institution. So far so good: it must be granted the right of its opinion, although on many occasions of importance it refuses either to have or then to express a frank opinion. When, however, in its opposition to the medical profession, this paper publishes an editorial claiming that the physicians of the state are trying to *control* the Board and insinuating that their motives are other than the upbuilding of our great hospital, it is uttering a cowardly statement which it knows to be false. It is careful not to mention figures as it is too patent that the proportion of 3 to 5 does not come near giving control.

There is little redress for analogous statements printed for sensational effect or ulterior motives. The lay papers reach thousands who never see a medical journal. If they print a correction it is frequently garbled or put where it is not very likely to be seen and they have the last word anyway. Still it gives some relief to express among ourselves what we think of such methods and to object in a vigorous manner even if our protest is heeded only in a few quarters.

The Physician Under State Pay.

There has recently appeared in the public press references to an effort on the part of the British Medical Association to create

sentiment in favor of the public employment of physicians even to the extent of influencing the abolition of the private practitioner.

This subject is nowise new, and the JOURNAL more than once has discussed the physician in his relation to the state. There are many reasons to believe that in some degree this plan may prove possible as the years go by.

The irregularity in compensation for the services of physicians, dictated by individual estimate and by the purse of the patient, is one factor which might urge the layman to favor some fixed rule to govern the practice of medicine in this regard.

Another elemental phase bearing on the general question is the increasing demand made upon the physician by that part of the public which is either unwilling or unable to pay for services rendered. It is proverbial that a man who practices medicine habitually discounts his possible income by at least one-third of the time, which is spent in gratuitous service. This does not apply to the physician or surgeon who often gives one-half of his working hours to institution service. It is noteworthy, on this point, that the public hospital grows more and more numerically and in its importance so far as its service to the public is concerned. There was a time when hospitals were employed as the necessary evils of a community to which only the indigent and accidental cases were sent. Now, almost all large cities carry sectarian and other hospitals which fulfill wide purpose in meeting the demands of the public from among all of its classes, even those who are more than well-to-do.

In most of these hospitals a certain amount of revenue is derived from patients by the institution, but the physicians, through a false sense of competition and rivalry for positions, render service for nothing.

The state or municipality seems often satisfied at contributing much less than a necessary amount for the maintenance of such institutions.

The natural competition in the practice of medicine arising from existing conditions enforce a commercialism which often discounts the dignity of the profession generally and particularly of the individual concerned.

It is only a question of time when the proverbially underpaid medical profession will make some demand upon the state for compensation for institutional work and when that time comes the wedge will have been started in establishing a relation between the physician and the state. Already in the larger cities of this country physicians are employed in certain sections to do house practice under the title of "District Physicians" and almost all of the time of these men is occupied in such practice. As the individual state grows more wealthy under increased population and the response to a natural taxation the tax payer himself may seek systematic service under a state system of medical practice.

The Mutual Raises Examination Fees.

The Mutual Life Insurance Company has given out the information through its state medical director, Dr. John B. Elliott, Jr., that it has gone back to the \$5.00 fee for medical examinations. The Mutual Life is to be commended for its action and we have no doubt but that other companies will have in time to follow this example if the medical profession continues a dignified agitation and moral pressure with that end in view.

Abstracts, Extracts and Miscellany.

Department of Ophthalmology.

In Charge of DRs. BRUNS and ROBIN, New Orleans.

NEW TREATMENT OF CHRONIC SIMPLE GLAUCOMA BY COMBINED INDUCTOMY AND SCLEROTOMY—By Dr. Lagrange of Bordeaux (Translated by Dr. A. E. Robin, New Orleans)—Chronic simple glaucoma is an infection characterized by excavation of the papilla, moderate hypertension with occasional intermittent exacerbations. Contracted visual field in nasal and meso-inferior quadrants, and relative preservation of the color sense, these char-

acteristics are at once sufficient and necessary to differentiate this disease from simple atrophy of the papilla with excavation. In the latter affection the field of vision, the color sense and intra-ocular tension, behave in a totally different manner and we desire it at the outset to be distinctly understood that we will treat, in this paper, exclusively of chronic simple glaucoma as herein defined.

It is quite true that hypertension in chronic glaucoma is not always easy to elicit insomuch that it is sometimes intermittent and consequently when it is doubtful we may rest our diagnosis more securely upon the careful study of the visual field, the color sense and the progress of the affection which keeps step with the intermittent exaggeration of extra ocular tension.

The hypertension is the real cause of all the trouble to vision without which there can be no true glaucoma and hence we should direct against it all our therapeutic measures.

We are fully conscious of the efficiency of simple iridectomy in irritative glaucoma whether acute or chronic and we are equally convinced of its utter uselessness, nay, of its contraindication in chronic simple glaucoma. The multiplicity of measures produced for its relief testify to the little value of each.

1. The mode of action of various treatments employed against chronic glaucoma. These therapeutic measures can be divided into two categories:

- 1^o. Those addressed to the inhibition of intra-ocular secretion.
- 2^o. Those aiming at promoting excretion.

A. The measures heretofore practiced to reduce intra ocular secretion have proven illusive and we are not surprised at their failure for chronic simple glaucoma is nearly always the result of profound changes in the coats of the eye, the fundamental anatomic lesion being angio-sclerosis. This angio-sclerosis carries with it such disturbance to the circulation that the equilibrium between the secretion of fluids and their excretion is arrested, the more so, as the emunctory organs, the canals of Schlerum and the spaces around the vasa vorticosa are not slow in becoming choked up with cellular debris carried by the liquids of the eye in

the course of their elimination. With many other histologists, we have frequently found in the meshes of the canal of Schlerum epithelial debris, altered corpuscles, desquamate endotheliums and neoplastic cells closing up this sewer and thus stopping its function. Long before the closing of the irido-corneal angle by agglutination of the iris to the cornea, there appear at the filtration angle anatomic changes seriously interfering with normal excretion of fluids.

Whenever it becomes impossible to remove the obstruction in this filtration angle means must be sought to reduce intra ocular tension. For this purpose such remedies as strophanth, adonis vernalis and other systemic agents are used; but it is not rash to say that their efficiency is very limited in the cure of chronic glaucoma. The attempt has frequently been made to reduce intraocular tension in a definite manner by resection of the superior cervical sympathetic, but experience has demonstrated what the theory would lead us to foresee, that we cannot by this manner obtain permanent results. It is quite true, that after this operation the tension of the eye is notably reduced, but it is equally true that hypertension returns to its former degree after the lapse of a few weeks.

Myotics are after all then the only medical means really possessing the power to reduce intraocular tension and with the aid of general agents acting upon arterio-sclerosis and promoting diuresis, they are a very important resource but we should realize their limitation. As a rule they only moderate glaucomatous accidents, thus putting the patient in a more favorable condition for surgical intervention.

It is possible that myotics by acting upon the nervous system may reduce the intraocular secretion, but it is much more probable that by the action in contracting the pupil thereby enlarging the absorbing area of the iris and freeing the filtrating angle is explained in great part, the action of serum and pilocarpine.

If this be true, then we should place myotics in the second category, that is, those means promoting the excretion of fluids from the eye.

B. The latter means include all surgical measures ever proposed for the cure of glaucoma.

Iridectomy, according to Donders, acts by reflexly inhibiting intraocular secretion. In the same manner Abadie holds that the good effects of the operation are due to the excision of the nervous plexus residing in the middle part of the iris—but these authorities are the only ones sharing this belief. Webber and Knies think that it acts by opening up the iritic angle, while Fuchs and Axenfeld believe that after iridectomy the liquids fuse under the choroid where they are reabsorbed. Bowman and Ulrich think that the large coloboma of the iris permits freer passage of fluids from the vitreous to the anterior chamber and to their disappearance by osmosis and finally Stelway von Corion and de Wecker especially have insisted upon the existence of a filtrating cicatrix and its importance in the cure of glaucoma.

This last explanation of the action of iridectomy has given rise to a host of operations having this end in view. De Wecker's anterior sclerotomy, sclero-iridectomy of Terson, irido-dyalisis De Wecker, posterior sclerotomy of Motais, Porinaud, Galezowski, etc. All these authors evidently aim at facilitating filtration by these operations. It is quite true therefore that the majority of operators, no matter what their notions be of the pathology of glaucoma believe that the method of cure consists in promoting elimination from the eye. We share this belief ourselves with Priestly Smith when he says that the only really efficient treatment of chronic simple glaucoma consists in bringing about a sub-conjunctival sclero-corneal fistula and with Critchett who declares that the operator who discovers the safe and sure method of such a filtrating sear will deserve well of humanity.

Long ago we have concurred in the accuracy of Holths' observation concerning the preservation of sight in glaucomatous eyes when iridectomy had been incorrectly done—that is when either one or both angles of the iris were entangled in the wound. Is it not quite probable that close observation would reveal the fact that iridectomy does not act otherwise even in acute glaucoma? But entanglement of the iris in the scleral region is particularly

dangerous because of irritation of the iris and sympathetic ophthalmia. It is with a view, therefore, of avoiding these dangers of entanglement of the iris that we have imagined our procedure of iridectomy combined with sclerotomy for the cure of chronic simple glaucoma.

About half an hour before the operation, besides the usual anti-septic precaution, we instill a few drops of a solution of serum. It is desirable for two reasons to have the pupil contracted: first, by allowing a freer passage for the knife and second, by keeping out of the way during the stage of excision of the sclera. After several instillations of cocain and adrenalin securing anesthesia and anemia of the tissues we proceed as follows:

1st stage: With Graefe knife we puncture the sclera about one millimeter from limbus and make counter puncture at a corresponding point and complete the incision in sclera with the cutting edge of the knife directed posteriorly and when the knife is under the conjunctiva we make a large flap of this membrane as practiced by Graefe in his linear extraction.

2nd stage: We raise the conjunctival flap carefully with fine forceps and with very sharp scissors we resect a good sized fragment of the anterior lip of the wound the conjunctival flap being respected.

3rd stage. Iridectomy is then practiced in the usual way and when the angles of the iris have been well reduced we carefully replace the conjunctival flap and bandage.

The results obtained in twenty cases, the first case having been operated on 3 years ago, have given me great satisfaction both from the point of view of improvement in visual acuity and increased field of vision.

In the twenty observations, six cases showed marked improvement in vision, two cases were decidedly improved in their field of vision and the remainder maintained their vision before operation.

We are aware of the tendency to error from hasty conclusions but if we compare our results with the published statistics of the most optimistic authors as cited by DeWecker in his report to the

French Society of Ophthalmology in 1901 we have the right to great expectations from the operation of iridectomy combined with sclerotomy.—*Recueil D'Ophthalmologie*, January, 1907.

Louisiana State Medical Society Notes.

In Charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

MINUTES OF 1907 MEETING.

(Continued from August JOURNAL.)

DR. E. J. GRANER presented his report as Councillor of the Second Congressional District, as follows:

Gentlemen—As Councillor of the Second Congressional District I beg to report the following, showing the organization and condition of our profession in the district:

The Second Congressional District comprises the parishes of St. Charles, St. John, St. James, Jefferson and part of Orleans, from Julia street to upper city limits.

The District has three component organizations, St. James Parish Medical Society, with a membership of 15 physicians; St. John-St. Charles Bi-Parish Medical Society, with a membership of ten physicians; the Orleans Parish Medical Society, which includes the whole of the Parish, has a membership in good standing of 252 physicians; there are about 75 registered and eligible men of the profession in the City of New Orleans who are not members of the Parish organization.

We have made many efforts to get them to join us, but to a certain degree have failed; I trust though that by constant hammering and persuasion we will yet be able to have them with us.

We have in Orleans Parish 693 physicians registered, 662 with diplomas, 31 without diplomas, besides we have a number of so-called medical gentlemen who have and have not diplomas, and

who cannot register, but who are at liberty to practice, with and without medicine. This class of frauds and imposters will, I trust some day, with the help of the enlightened and patient public and medical education, be erased from poor old Louisiana's history of voodooism.

Respectfully submitted,

E. J. GRANER,

Councillor 2nd Dist.

DR. J. L. SCALES presented his report as Councillor of the Fourth Congressional District, as follows:

To the President and Members of the Louisiana State Medical Society: In making this my annual report for the current year I desire to say that to the best of my knowledge and belief the condition of the profession at large is satisfactory and the interests of the state society well cared for in the Fourth Councillor District.

Each parish is identified with a local society except Sabine. There was at one time a Sabine Parish Medical Society but it is now defunct. I made an earnest effort to revive the same, and to that end I wrote a personal letter to each of the twenty-three (23) physicians practicing in that parish, asking each to advise me if he thought an effort to revive the defunct Sabine Parish Medical Society advisable and timely, and further if he was willing to co-operate in such an attempt. To these letters I received only five (5) replies, and one of them from a gentleman no longer in active practice. The indifference thus manifested did not promise success and the matter was dropped for the time being.

In December I received from the secretary a list of 24 delinquent members in the several parishes of my district with the request that I make an effort to have them pay up and prevent their names being dropped from the roll of the state society. I immediately wrote to each gentleman so involved, and I am glad to say that the secretary advises me that six of them responded and paid up. I consider the matter of persuading members to keep themselves in good standing a matter of supreme im-

portance to the society, inasmuch as its perpetuity depends on the continued membership of its units, the individual physicians.

Respectfully submitted,

JNO. L. SCALES,

Alden Bridge, La.

Councillor 4th Cong. Dist.

May 13, 1907.

DR. S. L. WHITE presented his report as Councillor for the Fifth Congressional District, as follows:

To the President and Members of the Louisiana State Medical Society: The Councillor from the Fifth Congressional District desires to report as follows: There has been no change in the parish organization since the last report. Every parish in the District is maintaining a Society except three, viz:—East and West Carroll and Madison. There are comparatively few physicians in each parish, and after some correspondence it was decided that organization at this time was not feasible. The latter parish (Madison) could I think maintain a society, it having some thirteen physicians in its confines.

I am glad to report that all the component societies, with one exception, are in a prosperous condition. Morehouse and Claiborne are particularly to be complimented, for out of a total of nineteen legal practitioners in the former, eighteen are members in good standing; while Claiborne has nineteen out of twenty-three qualified practitioners as members of its society. Of my own parish, (Lincoln) I am not so proud, for out of twenty-three registered physicians only eleven are now in good standing. There are others that have been members, but are now delinquent. The Lincoln Parish Society, however, boasts of a "Study Section" which has been recently organized. Nine chairs have been established, each physician having assigned to him a particular branch or branches, and during the first six months of study, work is being done in the elementary branches; in fact the course is supposed to cover the usual four year medical course. The plan is earnestly recommended to the consideration of the profession of the state, as a scheme that will increase the interest in the local societies, and raise the standard of medical education.

I have written a personal letter to every delinquent in my district, urging them to pay their dues and become reinstated. I am glad to state that a goodly number have responded to the appeal. I append a statistical report which is practically correct.

Respectfully,
S. L. WHITE, Councillor.

APPENDIX TO DR. WHITE'S REPORT.

Parishes	Phys. Registered	Members Society	Not Registered
Caldwell	10	9	1
Catahoula	18	4	
Concordia	8	6	
East Carroll	6	2	1
West Carroll	4	1	
Claiborne	23	19	3
Franklin	14	13	
Jackson	13	6	3
Lincoln	23	11	1
Madison	13	3	
Morehouse	19	18	
Ouachita	21	10	1
Richland	15	8	
Tensas	14	7	
Union	19	3	
	<hr/> 220	<hr/> 120	<hr/> 10

DR. C. M. SITMAN presented his report as Councillor for the Sixth Congressional District, as follows:

Greensburg, Louisiana, May 13, 1907.

Report of Dr. C. M. Sitman, Medical Councillor for the Sixth Congressional District of Louisiana, comprising the following parishes: Ascension, East Feliciana, St. Helena, Tangipahoa, Iberville, Livingston, Washington, West Feliciana, East Baton Rouge, Point Coupee, St. Tammany, and West Baton Rouge.

All these parishes are organized except St. Helena, Livingston, and Point Coupee.

Ascension Parish Medical Society has for its officers: W. M. McGalliard of Donaldsonville, Pres.; T. H. Hanson of Donaldsonville, Vice Pres.; Paul T. Thibodaux, of Donaldsonville, Sec. and Treas. It also has 16 registered graduates, 12 members and no delinquents.

Iberville Parish Medical Society has for its officers: A. A. Alain of Bayou Goula, Pres.; W. E. Barker of Plaquemines, Vice Pres.; W. L. Grace of Plaquemines, Sec. This society has 22 registered graduates, 17 members including 3 delinquents.

East Baton Rouge is organized with 31 registered graduates, including 3 colored, 22 members and no delinquents. Officers: Pres., T. P. Singletary, Baton Rouge; Vice Pres., T. C. Foreman, Foreman, La.; Sec. and Treas., J. A. Caruthers, Baton Rouge.

East Feliciana and West Feliciana organized together under the name of the Feliciana Medical Society, and has 24 members including 1 delinquent. The two parishes have 29 registered graduates, East Feliciana 21, and West Feliciana 8. Officers: W. Burckhalter, Pres., Laurel Hill; Vice Pres., R. P. Jones, Clinton; Sec. and Treas., A. C. McKowen, Jackson. Livingston not organized, 5 registered graduates and one at large in good standing, Dr. T. D. Odom, French Settlement.

Point Coupee not organized, but has been in action since 1904, has 13 members at large including 7 delinquents.

St. Helena not organized, no material for organization, there being only 4 registered graduates. Two members, Dr. E. O. Powers of Grangeville and Dr. C. M. Sitman of Greensburg are members of the Tangipahoa Medical Society.

Dr. V. A. Lea, a graduate of Tulane class of 1905, has recently moved to Greensburg from Huron, Mississippi.

Dr. A. R. Carter, a graduate of Memphis class of 1905, has recently moved to Greensburg from Karon, La.

Dr. F. D. Dunshie, a graduate of Tulane, has recently moved to Grangeville.

Dr. E. O. Powers has recently moved to Baton Rouge.

St. Tammany is organized with 13 members and 16 registered graduates and no delinquents. Officers: Pres., R. B. Paine, Man-

deville; Vice. Pres., N. M. Hebert, Covington; Sec. and Treas., J. F. Piggott, Covington.

Tangipahoa Parish Medical Society organized with 23 members, including two from St. Helena, and 21 registered graduates. Officers: Pres., H. C. Morris, Kentwood; Vice. Pres., C. S. Stewart, Amite City; Sec., J. L. Lenoird, Amite City.

Iberville—J. L. Danos.

Washington Parish organized within the last year with 9 members and 10 registered graduates and no delinquents. Dr. Johnson, Pres.; Dr. Latemore Brock, Sec.

West Baton Rouge organized with 7 registered graduates and all members including 2 delinquents. Officers: Pres., F. H. Caruth, Lobdell; Vice. Pres., J. C. Dizier, Walls; Sec. and Treas., H. C. Richie, Chamberlin.

I wish to state that my report for this meeting is not what I would have liked it to be, in consequence of my long protracted and very serious attack of Lagrippe, which kept me in bed for two and one-half months, and have not been able since the first of last December to get out from home or to attend to my business.

Respectfully,

C. M. SITMAN, M. D.,

Councillor for the 6th Congressional District, State of Louisiana.

DR. J. J. ARCHINARD presented the report of the Committee on Arrangements.

Under the heading "Dropping Delinquent Members from the Roll," DR. LAZARD read the following

REPORT ON DELINQUENT MEMBERS.

The following members were dropped from the rolls December 1, 1906, for non-payment of dues:

Acadia—G. C. Mouton, L. C. Pulliam.

Avoyelles—H. R. Olliphant.

Bienville—N. A. Culbertson, G. W. Tait.

Bossier—W. F. Bell.

Calcasieu—R. E. Oden, E. J. Perrault, C. L. Richardson, A. P. Stewart.

- Claiborne—J. C. Chapman, E. B. Walker, J. G. Gladney.
DeSoto—H. C. Stokes, J. R. Rushing.
Franklin—W. H. Berry, T. B. Poindexter.
Grant—G. W. Durham, M. Dunn, W. A. Jones.
Iberia—H. A. King.
Iberville—J. L. Danos.
Lincoln—A. DeSeay, S. P. Smith.
Morehouse—C. D. Clark.
Natchitoches—J. A. Hendrick, M. D. Hendrick, F. W. E. Truly,
S. H. Scruggs, C. E. Galloway, C. Galloway, E. G. Saunders.
Ouachita—W. B. Miller, E. L. Wright, J. H. Catlett.
Pointe Coupee—B. Mount, J. J. Delambre, E. H. Smith, S. W.
Turpin.
Rapides—A. R. Choppin, J. B. Everett.
Richland—C. G. Snyder.
Sabine—W. P. Addison, F. C. Bennett, G. M. Mott, Lee
Pines.
St. Landry—A. J. Strange, Paul Foster, W. R. Lestrapes, J. P.
Saizan.
St. Mary—T. E. Dreher, W. J. McClellan.
Tangipahoa—C. M. Abbott, J. M. Craig, C. E. Kennon, C. V.
McConnico, W. B. Travis, E. H. Williams.
Terrebonne—E. W. Brown, W. J. Brown, A. Delcourt, Jr., Leon
Jastremski, J. A. Pujos, P. E. Thibodaux.
Union—J. G. Evans, B. B. Garland, G. P. Smith, P. A. Tatum,
J. G. Taylor, C. S. McDonald.
Vermillion—H. B. White.
Vernon—A. M. Hughes, H. L. Sanders.
Webster—J. J. Gladney, T. J. Vance.

Respectfully submitted,

JULES LAZARD, M. D.,
Treasurer.

DELINQUENT PARISH SOCIETIES.

New Orleans, May 24, 1907.

The following Parish Societies, which were organized and in full vigor last year, have failed to remit dues for 1907:

Caldwell, Concordia, Jackson, and Washington.

The members of these societies will be continued on the rolls until December 31, 1907, when they will be *ipso facto* dropped for non-payment of dues.

Respectfully submitted,

JULES LAZARD,

Treasurer.

DR. LITTELL: I hear the name of Dr. Foster among those that are to be dropped from the rolls. It seems to me this must be an error, because he is a very active member of our Society, and before he is dropped I would like to have time to make inquiry.

DR. BOUDREAU: I wish to say that Dr. Foster and Dr. Las-trapes have never applied for membership in the Louisiana State Medical Society. Their names were sent here, but not as members of the State Society. They have since said that they did not wish to be members of the State Society, but desired to remain members of the Parish Society.

THE PRESIDENT: Doctor, you perhaps are not aware that membership in the Parish Society is *ipso facto* membership in the State Society.

DR. LEBEUF: I make a motion that their names be not put on the list until there is such an investigation as the gentleman desires to make.

The motion was adopted.

THE PRESIDENT: I understand that this matter is to be disposed of at this meeting.

DR. THIBAUT: Members are not dropped until the year is over. They are considered as delinquents from the time that the thirty day limit begins, but when a member has been re-instated by his Parish Society and his dues paid us, we accept the verdict of the Parish Society, and the mere fact that his dues are sent by the secretary to the State Society is sufficient. After thirty days members are put on the delinquent list and carried to the end of the year, when they are dropped. The only way we can keep our record straight is through the Parish Secretary and Treasurer. There would be no use of organization if the members dealt direct with the State Secretary and State Treasurer. All per-

sonal checks, and communications from individual members are referred back to the officers of the Parish Society.

DR. THIBAUT, the Secretary, then presented the report of the committee on Scientific Work, as follows:

ANNUAL REPORT OF COMMITTEE ON SCIENTIFIC WORK.

New Orleans, May 14, 1907.

To the Officers and Members of the Louisiana State Medical Society:

Gentlemen: The Committee on Scientific Work presents the program for the 1907 meeting as its report.

The titles of the papers by Drs. J. A. Storek and C. J. Edwards have been added to the Section on General Medicine at the request of the Chairman of that Section, Dr. J. C. Willis, who had failed to furnish the information in time.

The paper of Dr. S. P. Delaup was, through error, placed under the Section on Genito-Urinary Diseases. We respectfully ask the Chair to transfer it to the Section on Surgery, where it belongs.

Respectfully submitted,

COMMITTEE ON SCIENTIFIC WORK,

P. L. THIBAUT, M. D.,
Chairman.

DR. CHASSAIGNAC then presented the following report of the Committee on Public Policy and Legislation:

May 14, 1907.

To the President and Members of the Louisiana State Medical Society:

Gentlemen: I beg to inform you officially that our attempt to pass a bill amending the act regulating the practice of medicine in this state at the last session of the Legislature did not succeed. Your Committee on Legislation, together with the Auxilliary Committee appointed by the President, did all in their power and the Councillors of the Society, particularly the Chairman, also made earnest and energetic efforts to have the bill passed. Members at large of the Society also did very good work and responded in large numbers to the requests of this Committee for information and assistance.

There is no doubt that we had secured the endorsement of a majority of both Houses of the Legislature and that any measure coming before the respective Houses with the favorable report of the Committee in charge of the bill would have been passed without difficulty. The tactics successfully adopted by our opponents were to have objectionable amendments added to our measure to the extent that it was deemed best to withdraw our bill and wait for a more auspicious moment if we decided to make any further attempts in that direction. Our defeat was encompassed in the Senate Committee.

Further details can be furnished if the Society so desires, but in the judgment of this Committee any further information had best be reserved for an Executive Session.

Respectfully submitted,

CHAS. CHASSAIGNAC, M. D.,

Chairman.

The secretary then presented the following report of the Committee on publication:

ANNUAL REPORT OF PUBLICATION COMMITTEE.

New Orleans, May 14, 1907.

To the Officers and Members of the Louisiana State Medical Society:

Gentlemen: Your Committee begs to report that it has been unable to publish in the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL all papers furnished it. This has been due to various causes.

First, our Transactions were not furnished by the stenographer before the month of July, so that the first publication appeared in the August issue.

Secondly, your Chairman, owing to conditions over which he had no control, was unable to give his attention to the work of the Committee for a period of nearly three months. He begs to accept his share of blame for the delay.

In the third place, the loose way in which papers were furnished this committee, made it impossible to judge how much matter

would be in hand for publication. We would, therefore, respectfully request that Section 5 of Chapter III. of the By-Laws be rigidly enforced.

The Committee begs to be allowed to remain in force until all papers entrusted to its care have been published.

PUBLICATION COMMITTEE,

Chairman.

(Minutes to be continued in next issue of the JOURNAL.)

Medical News Items.

THE SIXTEENTH INTERNATIONAL MEDICAL CONGRESS will meet in Budapest, the capital of Hungary, in 1909. The date of the opening is fixed for August 29 and the sessions will continue until September 4.

THE REPORT OF THE SANITARY DEPARTMENT OF THE ISTHMIAN CANAL COMMISSION shows a death rate among the white employess for June of 21.05 per thousand per annum; among the blacks 29.96 per thousand. The diseases causing death, in the order of their importance, were pneumonia, traumatisms, typhoid fever and malaria. The report states that malaria is quite prevalent, but the mortality rate is remarkably low.

THE ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS AND SURGEONS of Philadelphia for the year 1907 has been awarded to Dr. Wm. Louis Chapman of Providence, R. I. The subject receiving the award was entitled "Postoperative Phlebitis, Thrombosis and Embolism."

AN INTERNATIONAL CONGRESS AGAINST ALCOHOLISM is planned to meet in London in the year 1909 under the honorary presidency of the Duke of Connaught.

THE SECOND INTERNATIONAL CONGRESS OF PHYSIOTHERAPY WILL BE HELD AT ROME from October 13 to 16.

MEMPHIS Proposes an Anti-Mosquito Campaign.

AN ARMY HOSPITAL IS NOW UNDER CONSTRUCTION in the District of Columbia. Associated with this will be the Army Medical School and it is expected that a post-graduate school will be established for newly appointed assistant surgeons and older officers who may wish to take up some special line of study. When completed the hospital will be the largest of its kind under government supervision and will number many buildings. The site overlooks the national capitol and the hospital is to serve as a memorial of the late Major Walter Reed in recognition of his distinguished services in the investigation of yellow fever.—Exc.

THE SECOND INTERNATIONAL LEPROSY CONFERENCE is announced for 1909. At this time it is planned to hold the meeting in the city of Bergen, Norway, the home of Dr. Armauer Hansen, the discoverer of the leprosy bacillus. The date has not yet been decided.

THE TRI-STATE MEDICAL SOCIETY WILL HOLD ITS FOURTH ANNUAL MEETING in Shreveport this year in November.

MEDICAL STUDENTS AT FRENCH UNIVERSITIES.—For the summer course of 1907, there were 8,297 medical matriculants, of which number 796 were women. The University of Paris led with 3,369.

THE AMERICAN PUBLIC HEALTH ASSOCIATION WILL HOLD ITS 35TH ANNUAL MEETING at Atlantic City, N. J., from September 30 to October 4, 1907. Dr. Domingo Orvanos, of Mexico City, is President; Dr. Charles O. Probst, of Columbus, Ohio, is Secretary. We are pleased to notice that the first Vice President is Dr. Quitman Kohnke, now of Covington, La. The topics selected for discussion are of general interest and comprise the following:

I. Milk; II. Laboratory findings in diphtheria; III. Immigration in its relation to public health; IV. What nuisances should be abated by the board of health; V. Control of the so-called minor infectious diseases; VI. Vital statistics and the value thereof; VII. The construction and care of streets from a health standpoint; VIII. Amendments to Constitution and by-laws.

The profession is generally invited to attend the sessions of this meeting and the headquarters will be at the Marlborough-Blenheim Hotel.

THE SIXTH INTERNATIONAL DERMATOLOGICAL CONGRESS will be held in New York City, at the Academy of Medicine, Sept. 9 to 14 of this year. The program is an attractive one, and the subjects chosen for general discussion are not of exclusive dermatological interest, but appeal to the general practitioner as well. The first theme, "The Etiological Relationship of Organism Found in the Skin in Exanthemata," gives promise, not only of able presentation, but also of keen critical discussion, while the advantage to be derived from acquiring a scientific basis for quarantine and prophylaxis in these diseases is so great that this investigation must interest everyone concerned in the problems of hygiene and public health. The second theme, "Tropical Diseases of the Skin," while not of so much general importance, still is particularly apposite now that our attention is so frequently turned to the medical conditions of lands near the equator, and that we are apt to encounter tropical diseases or their sequelæ in the persons of those returning from our island possessions. The third theme, "The Possibility of Immunization Against Syphilis" and "The Present State of Our Knowledge of the Parasitology of Syphilis," takes up a subject in which until three years ago all advance seemed blocked by the impossibility of experiment, due to the lack of a susceptible animal. Metchnikoff's demonstration that the chimpanzee, when inoculated with human virus, will develop not only a chancre but also, as a rule, typical secondary lesions on the skin and mucous membranes, was the starting point of hundreds of animal inoculations which have revolutionized our knowledge of this disease, and whose significance is as yet not fully appreciated. Whatever our interpretation of the presence of the *Spirochete pallida*—and the conviction that it is indeed the long-sought causative organism is steadily gaining ground—the investigations of the last three years have solved many long-debated problems, and give promise of yet greater advances in the near future.—*Exc.*

OVER 700 EMERGENCY CASES were treated at the New Orleans Charity Hospital in July.

RULES OF SANITATION GOVERNING TEXAS.—Under a proclamation issued by W. M. Brumby, State Health Officer, stringent rules

are provided for the sanitation of public buildings in the State of Texas. Tubercular victims are not allowed employment in any public building, in any school or church, bake shop or slaughter house.

THE ANTI-TUBERCULOSIS LEAGUE'S MEDICAL COMMITTEE held a short session in Dr. G. F. Patton's office during the past month in order to permit the reading of a report by Dr. G. J. Dempsey, who on a recent visit to the North and East gathered considerable information with regard to methods which are being successfully used in that part of the country.

THE STATE BOARD OF PHARMACY HELD EXAMINATIONS ON AUG. 2 AND 3. Of the twenty-one applicants the following were successful:

Registered Pharmacists—A. L. Haag, Delhi; H. M. Rickets, E. L. Chappotel, G. W. Faivre, New Orleans; L. L. Pellerin, St. Martinville; Luke Bodin, Franklin.

Qualified Assistants—W. F. Cote, Baton Rouge; B. F. Bosse, Rayne; Jake Meyer, Lake Charles; F. F. Ambruster, H. Lichtenheld, H. Seckbach, E. F. Jacques, O. L. Hodge and L. Blanchard, New Orleans.

TULANE MEDICAL DEPARTMENT.—At the meeting of the Board of Administrators of the Tulane Educational Fund, held early in August, the plans for the new Richardson-Memorial Building, on the Tulane campus, were adopted. This building is to cost approximately \$150,000, is to be built of stone after plans drawn by Messrs. Andre and Bendernagel. This building will provide for the teaching of students in the department of medicine during the first two years of their work and will include all of the laboratory teaching excepting chemistry. The present chemical building on the campus is to be enlarged and facilities will be afforded for the instruction of students in both the academic and medical departments. These improvements will cost about \$50,000 and the building, when completed, is to be called the Richardson-Tulane-Chemical Institute.

With the balance of the funds derived from the sale of the present college on Canal Street, dormitories on the campus are to be erected

to accommodate medical students, and all of this fund has been derived from the sale of the Richardson-Memorial on Canal Street; this dormitory building will also be known as the Richardson-Memorial Dormitory.

The session of the Medical Department will begin on Monday, October 21, 1907. The Undergraduate Department has materially increased its teaching faculty and a number of new professors and associate professors have been elected for the coming session. As these have occurred from time to time the JOURNAL is pleased now to give full notice of the several professors and others who have been promoted or elected to new positions: These are Drs. Paul E. Archinard, Professor of Diseases of the Nervous System; Isadore Dyer, Associate Dean and Professor of Diseases of the Skin; J. B. Elliott, Jr., Professor of Clinical Medicine; E. D. Fenner, Professor of Orthopedics and The Surgical Diseases of Children; M. Feingold, Professor of Ophthalmology; C. J. Landfried, Professor of Otology, Laryngology and Rhinology. Drs. Herman B. Gessner, Associate Professor of Operative Surgery; William W. Butterworth, Associate Professor of Diseases of Children; Samuel M. D. Clark, Associate Professor of Gynecology, George S. Bel, Associate Professor of Clinical Medicine.

THE NEW ORLEANS POLYCLINIC.—In the Postgraduate Department some changes will also be found during the coming session. The period of teaching has been increased so far as the actual days of opening and closing of the Polyclinic session are concerned and two additions to the faculty have been made in the persons of Dr. William M. Perkins, elected Professor of Clinical and Minor Surgery, and Dr. Henry E. Menage to be Professor of Diseases of the Skin, succeeding Dr. Dyer, who retires from the Postgraduate Department.

THE SOUTHERN MEDICAL ASSOCIATION, which is also called the Southern and Gulf Branch of the American Medical Association, comprising the States of Alabama, Georgia, Texas, Mississippi, Louisiana, Florida and Kentucky, will meet in Birmingham, Alabama, September 24, 25 and 26, 1907. The president is Dr. Henry

H. Martin, of Savannah, Georgia. We notice that Dr. E. D. Martin, of New Orleans, is one of the Councillors, and Dr. F. W. Parham, of New Orleans, is Chairman of the Section on Surgery. Dr. Oscar Dowling, the President of the Louisiana State Medical Society, of Shreveport, La., is Secretary of the Section on Ophthalmology. We are pleased to note the representative character of the administration and trust that the meeting may prove a success.

THE AMERICAN PROCTOLOGIC SOCIETY held its Ninth Annual Meeting at Atlantic City, N. J., June 3 and 4, 1907.

The following officers were elected:—President, A. Bennett Cooke, M. D., Nashville, Tenn.; Vice President, Louis J. Krouse, M. D., Cincinnati, Ohio; Secretary-Treasurer, Lewis H. Adler, Jr., M. D., Philadelphia, Pa., and the Executive Council, J. Rawson Pennington, M. D., Chicago, Ill.; Chairman, Samuel G. Gant, M. D., N. Y. City, N. Y.; A. Bennett Cooke, M. D., Nashville, Tenn.; Lewis H. Adler, Jr., Philadelphia, Pa.

The place of meeting for 1908 is Chicago, Ill., the time to be announced later.

PERSONALS—Dr. B. A. Pope is spending his vacation in Colorado Springs.

Dr. Paul Michinard is spending his vacation at Asheville, N. C.

Dr. Paul Reiss is at Cobourg, Can.

Dr. E. W. Jones sailed for Europe to spend his vacation.

Dr. I. I. Lemann is at Charlevoix, Mich.

Dr. G. S. Bel is in the mountains of North Carolina.

Dr. Thomas McCrae, Associate Professor of Medicine at John Hopkins University, has been elected a Fellow of the Royal College of Physicians and Surgeons.

Dr. J. H. Holstein has removed from Winnfield, La., to Lamourie, La., where he will practice.

DOCTORS RETURNED FROM VACATION—Dr. J. B. Elliott, Jr.; Dr. E. D. Fenner, Dr. S. M. Fortier, and Dr. J. G. Dempsey.

MARRIED—Dr. Thos. Norwood, of Norwood, La., was married to Miss Isabella Scott on July 30, 1907. The doctor will continue to practice in Norwood.

DIED—Dr. Joseph B. Killebrew, late President of the Mobile County Medical Society, was killed in an automobile accident in July.

Dr. W. H. Graham, of Shreveport, La., died on July 23, 1907.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

Principles and Practice of Dermatology. By WILLIAM ALLEN PUSEY, A. M., M. D. D. Appleton and Co., New York and London.

It is a personal pleasure and privilege to undertake the review of this work on dermatology which represents the earnest work of an American contemporary in this special field. Dr. Pusey has been a teacher of dermatology for a number of years, and has attracted particular attention through his early and remarkable work with radio-therapy. It is, therefore, a credit to him additionally that he should have saved the time to present so pretentious a work to the medical profession.

The book itself presents its subject in just 1000 pages. A large part of this is devoted to the Principles of Dermatology, and here mention may be made of the comprehensive way in which the elements of the skin are presented, both in the descriptive text and in the clear illustrations. The division of Pathology is especially good, while that on Treatment has been brought quite down to date, including even Wright's opsonic method. A few pages only are devoted to the general discussion of radio-therapy where a comprehensive resumé is given.

The bulk of the text falls under the general head of the Practice of Dermatology, and here the author has presented the subject in sections, each of which follows groups of skin diseases arranged after the general fashion originated by Hebra and followed by the American Dermatological Association. As with most texts on dermatology, however, justifiable liberty is taken with the classification where occasion has directed.

The illustrations in Dr. Pusey's text have been derived from various sources and are, for the most part, half tone cuts and, also, almost entirely original. This, perhaps, is the leading feature of this division of the work, as the reading text has been derived, in large part, from antecedent and contemporary dermatological literature, as the author states. The work throughout is well presented and some articles are notable. Of these the chapter on Eczema stands out in high relief. It especially carries the imprint of the author's expressive style, first reviewing the subject generally and discussing it academically. The author concludes the consideration of this disease with a running discussion of the eruptions of eczema as they occur in various sites of distribution of the body.

The article on Syphilis is unusually well illustrated, almost every type being shown. A comprehensive presentation is made of the organism of the disease and the section on treatment is excellent.

Leprosy receives reasonable consideration and the parasitic diseases are adequately covered. It is interesting to find pompholix classed with the sweat gland diseases in the face of much argument to the contrary, but the author's conclusion that pompholix occurs associated with hyperidrosis is the experience of the reviewer.

In summary we would say that there is much of original merit in the text under review, and it must take its place among the standard works on diseases of the skin published in the English language. The author has throughout credited his numerous references, and the subjects generally have been presented in a clear and comprehensive method.

The publishers are to be congratulated upon the excellent preparation of the illustrations and of the reading text.

DYER.

Surgical Diseases of the Chest. By CARL BECK, M. D. P. Blakiston's Son & Co., Philadelphia, 1907.

This work, handsomely bound and profusely illustrated, appeals mostly to the surgeon, but can be read with profit by any physician who desires to enjoy Beck's erudition.

The surgical anatomy of the chest and its surgical diseases, with appropriate treatment, are fully dealt with.

An excellent chapter pertains exclusively to the value of the Roentgen method in thoracic surgery, and as Beck was one of the pioneers in this form of work we realize its worth.

We read page 141: "An excellent American surgeon, Warren Stone, of New Orleans, also performed the so-called Estlander operation long before Estlander, and so did both Kuster (1873) and Schede. Estlander deserves credit, however, for having developed the method further." We note on page 136 mention made of Sauerbruch's air-tight chamber, which permits of the presence of surgeon, assistant, patient and operating table: "This ingenious invention, writes Back, eliminates the possibility of pneumothorax in antrathoracic operations by excluding the atmospheric pressure during the operative procedure, thus preventing collapsing of the lungs after being opened to the air."

No reference, to our astonishment, is made to the Fell-O'Dwyer method of insufflation.

LARUE.

The Technic of Operations Upon the Intestines and the Stomach. By ALFRED H. GOULD, M. D. W. B. Saunders & Co., Philadelphia and London, 1906.

This neat and solidly bound volume ought certainly to find its way into the surgeon's hands, who will be amply repaid by the practical value of its contents.

The technic of several, and perhaps the best methods are clearly described regarding intestinal and gastric surgery.

The illustrations could not be improved upon, some of them being exceptionally fine. No mention is made of Gastropexy (Beyer's operation), probably from the fact that it is, as Binnie states, commonly futile, the condition present being usually one of general visceral ptosis.

LARUE.

General Surgery. Vol. II. By GUSTAVUS P. HEAD, M. D., and JOHN B. MURPHY, A. M., M. D., LL. D. The Year Book, Publishers, Chicago, 1907.

This second volume of the Practical Medicine Series is undoubtedly one of the best. The introduction, by Murphy, is in itself a gem of advanced medical thought. We find therein the latest surgical ideas, abstracted from the best medical centers, often followed by Murphy's sound practical annotations.

Among other subjects of importance we read Dorrance's improved suture method in arteriorrhaphy, mention being also made of Matas' intrasaccular suture for radical cure of aneurism.

Bacon's new *dumb-bell* aluminum button for intestinal anastomosis is technically described.

We find our friend Scherk, formerly of New Orleans, but now residing in St. Louis, mentioned in connection with the prophylactic treatment he instituted in the St. Louis City Dispensaries against that fatal but *preventable* disease, tetanus.

Surgical Diagnosis. By DANIEL N. EISENDRATH, A. M., M. D. W. B. Saunders Co., Philadelphia and London, 1907.

The reviewer of this excellent work can commend it most highly, as he did the author's clinical anatomy. They both appeal to the busy practitioner, physician and surgeon alike, who will never regret possessing them.

Eisendrath's *Surgical Diagnosis* is a series of clinical hints, aided most materially by nearly 500 illustrations, fifteen of them in colors.

LARUE.

Operative Surgery. By JOHN F. BINNIE, A. M., C. M. (Aberdeen). P. Blakiston's Son & Co., Philadelphia, 1907.

The third edition of this little volume should be cheerfully received by the medical profession. As its predecessors, it is well presented in every respect, with the addition of recent surgical procedures. The decompressive operations on the cranium are clearly described. New diagrams and illustrations are interspersed, serving well their purposes.

LARUE.

Anesthetics. By DUDLEY WILMOT BUXTON, M. D., B. S. P. Blakiston's Son & Co., Philadelphia, 1907.

This attractive book is one of the best ever perused by the reviewer, who highly recommends it to his medical brethren. It is written (4th edition) by Buxton, of London, who is an acknowledged authority on this very important practical subject.

A historical sketch of anesthetics is first given which, coming from such a reliable source, enhances the value of the work. A chapter on the preparation of the patient then follows, replete with striking suggestions.

The various anesthetics are studied chemically, physiologically and as to their special value: Nitrous oxide, ether, chloroform, chloride of ethyl, somnoform, bromide of ethyl, pentol and ethidene chloride.

The alternating supremacy of the two somniferous rivals, chloroform and ether, affords very instructive reading.

A short but thorough consideration is devoted to local analgesia and spinal anesthesia.

LARUE.

Foods and Their Adulteration, &c. By HARVEY W. WILEY, M. D., Ph. D.
P. Blakiston's Son & Co., Philadelphia, 1907

The present status of public interest in pure foods of every description has been brought about through the endeavor of the author of this work, who has championed the cause and has devoted almost his entire time to the investigation of the evils extant. It goes without saying that no man living is better qualified to present the subjects of foods and their adulteration than Dr. Wiley. The examination of the work goes to prove this conclusion, for he has presented almost every phase of the food question to the reader. Here matters are discussed after a fashion which must satisfy the expert sanitarian and health official, and at the same time facts are presented so clearly that even the average layman of intelligence must gather information and wholesale education in the reading.

Meats, milk, nuts, fruits, condiments and extraordinary food stuffs are discussed thoroughly and guides are given for the detection of impurities and adulteration. Every chapter shows thorough preparation and illustrations are freely used to illustrate the text.

As appendices there are given the several Acts of Congress referring to the work of the Bureau of Agriculture relating to the requirements of standards in foods, drugs, &c.

This work is sufficiently standard to demand prominent place in the library of every intelligent householder, sanitarian and physician.

DYER.

Practical Medicine Series. Vol. X. *Skin and Venereal Diseases; Nervous and Mental Diseases*. Edited by W. L. BAUM, M. D., HUGH T. PATRICK, M. D., and WM. HEALY, A. B., M. D. The Year Book Publishers, Chicago.

The popularity of this series continues, and deservedly, because it serves as a review of current literature compiled by men qualified to select the best in the subjects discussed. The present volume is like those which have preceded it, and evidences the usual care in the editorial work. To the busy practitioner these little books save a great deal of time as they literally digest the subjects discussed for the general reader.

DYER.

The New Hygiene. By ELIE METCHNIKOFF. W. T. Keener & Co., Chicago.

The author of this little brochure, which is a published lecture delivered before the Royal Institute of Public Health in England, has gone far to establish new, if not novel, ideas relating to the role of the human individual in the universe. Without discussing his previous work, really the foundation of the present lecture, we would say that the little book in hand is another argument for the phagocytic theory in its relation to immunity from disease. It goes farther in the argument for the creation in the individual of immunizing substances to protect against prevalent infections. It is interesting and full of the spirit of the author, who has a convincing way about him. Incident to the general discussion are related, in running commentary, the experimental researches covering the recent theories of syphilis, typhoid, &c. Much philosophy is sprinkled through the context, and a concluding aphorism might be aptly quoted in concluding our review: "Ruined buildings and tattered clothing may appear more beautiful from an artist's point of view than a clean house and clean clothing, yet civilization tends ever more to replace the former by the latter; in questions of health, Morality should not attempt to lead Hygiene but should rather follow her."

DYER.

Essentials of Histology. By A. E. SCHAEFER, LL. D., Sc. D., F. R. S.
7th Edition. Lea Bros. & Co., Philadelphia and New York.

This new edition of a recognized and authoritative work on Histology has been materially enlarged and revised by additions to the sections on the central nervous system and by many new illustrations, some of which are in color. This branch of medicine has become more and more important in the training of the student and the usefulness of a clear text with adequate illustration needs no argument. The publishers have presented such a work so far as the press and typography are concerned. The author has supplied the material in a way which deserves only the most favorable endorsement.

DYER.

Lea's Series of Pocket Text Books; Materia Medica, Therapeutics, Pharmacology and Pharmacognosy, Including Medical Pharmacy and Prescription Writing and Medical Latin. By WM. SCHLEIFF, Ph. G., M. D., 3d Edition, Revised and Enlarged. Lea Bros. & Co., Philadelphia and New York.

The most important note in the review of this text is the statement that the revision has been carefully made so as to conform to the new Pharmacopea, the metric system having been introduced throughout; the equivalents in the old measures being also given. While intended especially as a text for students, many graduates in medicine will find this little book of especial value in refreshing the knowledge of prescription writing and medical pharmacy, two elementary branches of medicine much neglected by the busy and none too careful practitioner. As a text the work has fulfilled its usefulness hitherto and will likely go on doing so. In addition to the regular divisions of the text is given a list of new remedies which have appeared during the last few years.

DYER.

The Efficient Life. By LUTHER H. GULICH, M. D. Doubleday, Page & Co., New York.

A very pleasant series of essays on what should be the daily life of the individual influenced by the wholesome idea of what produces health. The author dedicates the text to Theodore Roosevelt and the dedication serves as the text after which the book is written. This dedication reads: "To Theodore Roosevelt who sometimes leads the simple life, who often leads the strenuous life, but who always leads the efficient life."

DYER.

Infectious and Parasitic Diseases. By MILLARD LANGFELD, A. B., M. B.
P. Blakiston's Son & Co., Philadelphia, 1907.

Professor L. F. Barker, of Johns Hopkins, in a brief introduction to this work commends the presentation of the subject matter because of the clear and simple manner employed, and the reviewer feels that this may be endorsed.

Beginning with the exposition of accepted theories regarding the causation of diseases, the author gradually leads up to the divisions of Bacteriology, and after describing the several micro-organisms of specific and non-specific type he submits an interesting discussion of the phenomena of infection. Particular conditions are afterwards related with the study of the organisms occurring in each. Certain chapters are devoted to the preparation of specimens for study and suggestions are given for the preservation of some. The work altogether commends itself as a philosophic presentation of the best there is in the higher phases of the study of infectious and parasitic diseases.

DYER.

Publications Received.

F. A. DAVIS, Philadelphia, 1907.

Diseases of the Stomach, by Dr. I. Boas. (From the German by Albert Bernheim, M. D.)

Diseases of Infancy and Childhood, Their Dietetic, Hygienic and Medical Treatment, by Louis Fischer, M. D.

WILLIAM WOOD & CO., New York, 1907.

Manual of the Diseases of the Eye, by Charles H. May, M. D. 5th Edition.

MISCELLANEOUS.

Announcement of the 35th Annual Meeting of the American Public Health Association to be held at Atlantic City, N. J., September 30-October 4, 1907.

Bulletin of the Tulane University of Louisiana (Medical Department), June, 1907.

Report on the Origin and Prevalence of Typhoid Fever in the District of Columbia, by M. J. Rosenau, L. L. Lumsden and Joseph H. Kastle. (Government Printing Office, Washington, D. C., 1907.)

Reprints.

Splanchnoptosia, by Byron Robinson, M. D.

Ergotine and Some Other Constituents of Ergot, by George Barger, M. A., D. Sc., and H. H. Dale, M. A., B. C.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.
FOR JULY, 1907.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	13	10	23
Intermittent Fever (Malarial Cachexia)	3	4	7
Smallpox.....		2	2
Measles	2		2
Scarlet Fever.....			
Whooping Cough	4	7	11
Diphtheria and Croup.....			
Influenza			
Cholera Nostras.....	1		1
Pyemia and Septicemia	4	2	6
Tuberculosis.....	42	46	88
Cancer.....	28	9	37
Rheumatism and Gout	2		2
Diabetes	1		1
Alcoholism	5	1	6
Encephalitis and Meningitis.....	7	5	12
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	20	7	27
Paralysis	1	2	3
Convulsions of Infants	1	2	3
Other Diseases of Infancy	27	9	36
Tetanus.....	3	6	9
Other Nervous Diseases	1	1	2
Heart Diseases	40	28	68
Bronchitis	4	3	7
Pneumonia and Broncho-Pneumonia.....	17	14	31
Other Respiratory Diseases	4	3	7
Ulcer of Stomach.....	1		1
Other Diseases of the Stomach	3	3	6
Diarrhea, Dysentery and Enteritis.....	42	18	60
Hernia, Intestinal Obstruction.....	2	3	5
Cirrhosis of Liver.....	6	5	11
Other Diseases of the Liver	2	1	3
Simple Peritonitis	4	2	6
Appendicitis.....	2	1	3
Bright's Disease	18	19	37
Other Genito-Urinary Diseases.....	4	3	7
Puerperal Diseases	3	4	7
Senile Debility	25	16	41
Suicide	3		3
Injuries.....	29	13	42
All Other Causes.....	16	9	25
TOTAL.....	390	258	648

Still-born Children—White, 27; colored, 24; total, 51.

Population of City (estimated)—White, 251,000; colored, 90,000; total, 341,000.

Death Rate per 1000 per annum for Month—White, 18.64; colored, 34.40; total, 22.80.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 30.00
Mean temperature 83.
Total precipitation 4.47 inches.
Prevailing direction of wind, south.

*Paullum sepultæ distat inertia
Celata virtus. — HORACE.*

New Orleans Medical and Surgical

Journal

ESTABLISHED IN 1844.

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OCTOBER, 1907.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

(Established in 1844.)

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New Orleans Medical and Surgical Journal.

VOL. LX.

OCTOBER, 1907.

No. 4

Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a **WRITTEN** order for the same accompany the paper.)

The Tropical Diseases of the Philippine Islands, with Especial Reference to Amebic Abscess of the Liver.*

By EDWARD WARWICK PINKHAM, M. D., of New York City.

Mr. Chairman and Gentlemen:—

I feel deeply the honor of being invited to speak a few words to you on tropical diseases as I found them. My remarks must of necessity be desultory and of a purely personal nature. My experience was gained in the Philippine Islands while serving for a period of about two years, as Assistant Surgeon in the regular army, and showed in a somewhat startling manner how unprepared we were both in our previous training and in our equipment to cope with the diseases peculiar to that region.

*Read at the Fourth Annual Meeting of the American Society of Tropical Medicine, at New York City, March 29, 1907, and printed under the imprimatur of the Society.

The diseases encountered with which we had not previously been familiar were the bubonic plague, beri-beri, dengue, sometimes not easily distinguished from malaria, tropical ulcer of the foot, the dhobie itch, and tropical or amebic dysentery. Cholera did not break out until after I was ordered home.

Of the bubonic plague I saw a little while I was in Manila. Those affected were nearly all natives or Chinamen, although I saw one case in a white man. It was that of a civilian teamster who fell from his wagon in a fit, and died four hours afterwards. His disease was demonstrated to be the plague.

Of beri-beri I saw many cases the greater part of them being natives or Chinamen. Two of our officers were afflicted with slight attacks. Had these two officers been in New York City at that time I should have made a diagnosis of multiple neuritis, perhaps alcoholic. We used to believe that beri-beri was caused by unhygienic living and surroundings. Cases did improve and some got well by change of environment. This was in 1900, and the rice theory came later.

We encountered a good many types of fever which we were accustomed to diagnosticate as being either malaria or dengue. If the patients had pain in their bones and got well promptly we called the disease dengue. If they had a protracted fever or died we called the disease malarial whether the plasmodium was demonstrated or not.

The so-called tropical ulcers affected the feet and ankles. At first we believed them to be caused by ill fitting shoes or a lack of cleanliness. But even when care was taken with the shoes and feet, and bathing was insisted on, the ubiquitous ulcer persisted.

The dhobie itch, a form of tinea, was invariably laid to the washerwomen. Everybody, from the General down, was affected. One soldier in my regiment had the disease so violently that he looked like a tattooed man. The whole body, including extremities, scalp and pubes, was covered with the eruption. This man almost went insane from the itch. A supersaturated solution of salicylic acid, made by the addition of alcohol, was the successful remedy used.

Shortly after our regiment, the ninth infantry, landed, the soldiers began to be affected with diarrhea, with or without blood. They were immediately dosed with camphor and opium pills or subnitrate of bismuth. The most of them got well, but some of them were sent back to Manila with a diagnosis of bloody diarrhea, or dysentery. It was surprising to note the large number of soldiers so afflicted who never returned to duty.

Dysentery of the amebic type soon proved itself to be the scourge of our troops. At first we thought we could cure it by irrigation of the rectum and colon with a solution of quinin, and by the diet, but in this we found ourselves mistaken. It did not surprise us particularly to have patients die from exhaustion after frequent and profuse hemorrhages, but when they died three or four weeks after we supposed that they were cured of the dysentery we were extremely puzzled. Up to May, 1900, my experience had been with troops in the field. But at that time I was ordered to Iloilo, on the Island of Panay, for duty as operating surgeon at the second largest military hospital in the islands. It was here that I learned the key to the cause of some of the hitherto unexplained deaths which occurred during and after attacks of dysentery, namely liver abscess of the amebic type. In regard to this affliction I shall ask your indulgence while I quote from a paper on the subject written by me for the Society of Military Surgeons in 1904.

“Among the more serious cases admitted were those of tropical abscess of the liver, accompanying or following amebic dysentery. Sixteen of these cases came under the writer’s care and were treated surgically.” (Description of cases omitted.)

“In this series of sixteen cases there were seven recoveries and nine deaths. The percentage of mortality is very high, but it can be easily accounted for. In eight of the fatal cases an autopsy was made and revealed conditions which could not have been discovered beforehand, and which rendered a fatal result certain. In some of them the operation gave a measure of relief to the symptoms, but could do no more.

It may safely be assumed that without surgical attention all these patients would have died. In a few of the non-fatal cases

a spontaneous discharge of the abscess might, under favorable circumstances, have occurred, leading to the recovery of the patient. But the circumstances in the Islands were not favorable; the patients were, almost without exception, emaciated and weak; the tendency of the dysentery was to recur and of the suppurative process to spread, making the chances of a spontaneous cure very small. It may, therefore, be rightly claimed that in this series of operations seven lives were saved and none sacrificed.

"Not more than six of these cases entered the surgical ward of the hospital with a correct diagnosis. In two of them the abscess was only suspected. In the other cases there was a wide range of diagnosis, embracing appendicitis, malaria (accounting for the chills), acute pleurisy, acute pneumonia, peritonitis, empyema, convalescence from typhoid fever, and delirium tremens with pain in the side. Gall stones, with or without cholecystitis, were apparently not thought of in this connection probably because the severe pain which usually accompanies this affection was absent.

"Abscess of the liver is a very rare affection in northern latitudes, and the literature of our ordinary books of reference is meager in regard to it; hence it is not strange that such very reasonable errors of diagnosis should be made by those who had had little or no experience in the treatment of tropical diseases. After a while the surgeons became more familiar with this common sequel of tropical dysentery so that they were on the lookout for it and made the diagnosis more readily. These errors in diagnosis, together with the total failure in all the cases to recognize the disease in its early stages account, in a large measure, for the high rate of mortality. A prompt recognition of the complication and appropriate treatment might have enabled us to make a different showing."

* * * * *

"It is seen that in a majority of cases dysentery was a concomitant affection. In those cases where there was no dysentery recovery followed. In all the cases there were emaciation and debility, and these were prominent factors in the fatality, or rather in the production of conditions which rendered a fatal result more likely

to happen. The loss of flesh and great weakness were due, of course, to the long drain upon the system both of the dysentery and of the unrecognized abscess, together with the depressing effects of the tropical climate.

"In thirty-two autopsies made on the bodies of those whose death had been ascribed to dysentery, abscess of the liver was found in five. In one case the liver was so filled with abscesses varying in size from the size of a pin's head to that of a pecan nut, that the cut surface of the right lobe gave the appearance of a "polka dot" piece of yellow brown cloth. A similar appearance was noted in one of the cases operated on.

"These so called abscesses of the liver are not true abscesses, nor are their contents pus. They are rather areas of necrosis, or liquification of the liver tissue, and their contents are made up of liver cells in all stages of degeneration and disintegration, free fat globules, more or less of blood corpuscles and serum. In this paper the terms abscess and pus are used for convenience. An examination, such as was possible with our imperfect outfit, was made in all the cases of the contents of the abscesses. Amebæ were found in eight of the cases. In some of these they were not discovered until the scrapings of the abscess walls had been examined. In the cases of long standing single abscesses followed by recovery amebæ were not found. In all the cases where there was concomitant dysentery amebæ were found in the stools. In all cases except the first it was made a practice to curette the walls of the abscess before packing, the object being to remove as much of the infected tissue as possible. The scraping was done very carefully and with a sharp curette.

"Finding an abscess in these cases is often a matter of luck; for unless there is a localized swelling of the liver surface there is no way of locating the pus except by the aspirator, and this sometimes fails even in cases where an abscess is afterwards found on section.

"In making a diagnosis of abscess of the liver the previous history of the patient is of the utmost importance. If a patient gives a history of having had dysentery of a tropical, or amebic type, if he has an indefinite pain, or a sensitive feeling over the liver area,

manifested on compressing the ribs on the right side, the pain radiating to the right shoulder; if he has chills, or chilliness, and more or less of fever, similar to that of septic infection, abscess of the liver may be suspected, whether or not the liver shows signs of enlargement. When dysentery is coexistent with the symptoms above mentioned it is almost certain that an abscess exists. Aspiration may be an aid to the diagnosis, but it is by no means a certain one. The liver may be punctured a number of times without obtaining pus, and afterwards on operation an abscess may be found. It is a good plan, however, after a patient is anesthetized to aspirate, for if pus is found the needle is a good guide to its locality, and if it is not found no harm is done. Aspiration under cocain proved in one of my cases to be an unpleasant and indeed somewhat dangerous proceeding. It is not, in my opinion, to be advised in these cases, for as a rule the patient's condition is too poor to stand much of the depressing effect of the drug."

* * * * *

"One interesting fact brought out by these operations is the demonstration of the freedom with which one may search through the liver tissue without dangerous hemorrhage. The search should be made by the finger rather than by any sharp or steel instrument. The finger seems to slip over the vessels without rupturing them. Manson lays stress upon the danger from hemorrhage in exploring the liver and speaks of the great friability of the tissue, making it extremely difficult to sew the liver to the wound. Neither of these troubles did I experience to any great extent.

"It is my opinion that no abscess, whether bulging or not, should be evacuated and drained by means of the trocar and canula as suggested by Manson. There may be adhesions of the liver to the wall and there may not be. Most likely they do not exist. One cannot be sure in any case, and the risk is run of infecting the thoracic or abdominal cavity if this method is followed. The operation by incision is surer and safer, and the shock to the patient is not greater except in extreme cases, and in these the quickest method is the best.

"Osler, in an article in the *Medical News*, of April 12, 1902, speaks of a diffuse cyanosis, as present in cases of abscess of the

liver. This symptom was present in so many of the poorly nourished soldiers suffering from a variety of diseases, especially recurrent dysentery, with or without abscess, that it did not seem at that time to be particularly diagnostic of abscess. He also speaks of the swelling noticed at the costal border. This swelling appeared in only a few of my cases, and was generally in the single abscess type, which almost invariably was followed by recovery. In this type of case there were no chills, but in the multiple abscess type with dysentery chills and irregular fever were always present. In two of the cases where there was dysentery, the colon was entered and irrigated. In one of these cases the great benefit derived from the irrigation was shown on autopsy, and in the other a cure was effected by this procedure.

"In my opinion this is the best method of treating those obstinate cases of recurrent dysentery which so often baffle medical skill. The most practical way to accomplish the end is to perform right inguinal colotomy. It is my belief that a large number of lives may have been saved in the Philippines during the late war had the surgical treatment been adopted. As it was, the antagonism of the great majority of our medical men to the introduction of surgical methods in the treatment of a disease which had hitherto been considered as belonging especially to the province of the physician, was too strong to be overcome. It is to be hoped that by this time a different spirit prevails among them, and that when necessary the surgeon is promptly called upon to aid in the treatment of the dread tropical disease which we are considering. When the attacks of dysentery have been stopped and the ulceration of the bowel healed, then the danger from that extremely fatal complication, abscess of the liver will have been greatly lessened."

Treatment of Tuberculosis.*

By DR. W. F. COUVILLION, Marksville, La.

The treatment of tuberculosis has been so varied and unsatisfactory, so routine and unscientific that in writing a paper on the subject, you are naturally at a loss where to begin:

*Read before the Avoyelles Parish Medical Society.

To give a history of what *has* been used could serve no purpose at all save to show our lack of knowledge of the question, and on the other hand to give only the latest, one could not well reach the desired end. I have endeavored in this short paper to make suggestions which, if looked into, might be beneficial.

That we will soon have some definite or possibly specific treatment, we are encouraged to hope for in the opsonins and opsonic index, we possibly have the first step to a scientific treatment of the dread "white plague." The profession has lately, I might say, bodily turned to the study of tuberculosis. Every journal has one or more articles in it. Some of our confreres are lecturing and others even writing for the lay press, so you can well hope for great things to come.

Tuberculosis being a systemic trouble where the human organism is gradually and persistently brought to a low state of vitality, the different organs of the body very frequently fail to perform their respective functions and hence we have a tuberculosis patient very often suffering more from a deranged function of an otherwise unaffected organ, than from the tubercle infected region.

In actual practice I have found that treatment of the patient for other conditions aside from the tuberculous condition, but superinduced by the infection, is so frequently necessary that when I meet a case now, instead of at once placing it in the old classical failures, I look to the other conditions and at once try to correct any trouble that might contribute to lowering the vitality of my patient.

I have frequently seen patients placed on preparations that were really injurious, not in themselves, but from the fact that the patient was not a factor in deciding on the treatment. That the routine practice of prescribing a tonic or reconstructive regardless of conditions, is a mistake, I hope all are agreed.

The treatment of tuberculosis should be classed about as follows:

1st. Prophylactic; 2nd, Climatic, 3rd Hygienic; 4th, Dietetic; 5th, Medicinal.

The first classification having been passed already, we will pay attention to the others only.

CLIMATIC TREATMENT: We are indebted to climato-therapeutics for a good percentage of the recorded cures; and on the other

hand very frequently no good or even positive injury has been done by change of climate. Very little care and judgment have been exercised by the average practitioner in selecting his cases, or rather the climate for his case. We have not studied the different phases of this dread disease and the possible assistance to be given to sufferers, hence our routine practice of scarcely doing anything for our patient.

Some cases are benefited by a high and dry climate, others do better in a cold climate with marked altitude, and still others, where the sea shore or a sea voyage is beneficial. However, in selecting our cases we have to be guided by different conditions, i. e., the disposition, whether melancholy or otherwise. The digestive condition. The fact of whether the patient can well leave home or not. The family attachments, and all these allied circumstances count for much in sending your patient away.

The financial condition of your patient, whether able to command the best attention and other allied conditions, must be considered. The condition of the circulation and the neurotic disposition of the patient have much to do with results. Very frequently the nostalgia incident to a change overcomes the possible good to accrue. Colorado, New Mexico and West Texas are to be credited with numerous cures and are types of high and dry climates. Pure air and plenty of it is probably the true secret of climato-therapeutics.

It is held by some clinicians that a change of climate is unnecessary, but all agree that open air is almost a *sine qua non*. In actual practice the great trouble is to convince the people that tuberculosis is not a mere taking of cold. Also to convince them that open air is the treatment par excellence. How very frequently do we see patients who declare that the least exposure to the open air causes them to take "fresh cold." How often has a patient been found to occupy a room that was so close that the vitiated air would almost knock you down when you went in. It is so often the rule that you are surprised when you meet exceptions. Hence the conclusion:

1st. That circumstances permitting, a patient found with incipient tuberculosis should be advised to seek a climate beneficial

to the case, not however without special stress being laid on the necessity of being under the care of a competent phthisiotherapist.

2nd. That where you cannot send them away, the open air treatment should be pursued, and you should study your case so closely that not a thing be left undone.

As to specific suggestions, I do not consider that a paper of this sort is calculated to cover them. I recommend as especially useful the home application of sanitarium methods.

HYGIENIC: This classification is almost a part of the climatic treatment, but care of the person from every view point cannot be too strongly insisted upon. The use of baths, sponge, plunge or shower can at times prove very beneficial. Personal cleanliness and attention to all the minor details so frequently neglected should be insisted upon.

What we might term living according to rules cannot be too strongly urged. The destruction of all excreta and the removal of all articles disposed to preserve dust, should be an inviolable rule.

DIETETIC: Here we have a great power for good, but one very difficult to carry out. My experience is that the chief trouble with most tuberculous patients is a capricious appetite. I have often noticed that persons who ate little and very few articles of diet were prone to develop tuberculosis, whereas your big eater and a free liver was much safer. It has been my custom when I could to encourage the cultivation of taste to enable them to partake of a mixed diet.

Superalimentation is the hobby of some clinicians, but an appetite is what is needed in most cases.

MEDICINAL: Here we have such a variety of suggestions that one is loath to go into it.

That medicinal treatment is necessary, we all admit, but the routine practice of giving a patient Cod-Liver-Oil and Hypophosphites or Guaiacol or Creosote cannot be too strongly condemned. The average practitioner has sought to treat the infection and not the different conditions brought about by the infection, and as no effect could be procured the failures have been incessant.

To be, in large measure successful, one should keep a careful

clinical history of his case; be able at all times to tell if the patient is doing better or not. By weight, measure or count of pulse—one should be in a position to guide his patient in an intelligent and scientific manner.

Guaiacol and creosote have been very extensively used, but eminent therapeutists have now practically discarded them. In a small percentage of cases—they are said to be beneficial, but on the other hand positively injurious to a large percentage of cases.

Another relic of our ignorance is cod liver oil. No close observer can claim any good derived from this agent. Compound Syrup of Hypophosphites has no special claim to efficacy further than as a tonic and then other drugs applied according to indications are far superior. The malt preparations come under the same category.

In prescribing drugs the chief good is to medicate according to indications and not have a routine method. One case may need iron, another not, one an aid to digestion where another may need treatment applied to a concurrent trouble as malaria.

Koch's tuberculin treatment has not yielded the anticipated but has borne some good results, and opened the way to further researches. After a full consideration of all theories and treatments advanced I believe are well based the following suggestions:

1st. Diagnose your case early, even before the bacillus can be found.

2nd. At once lay before your patient the true condition and the possible good to be derived from a careful and correct method of living.

3rd. Open air in the strict sense of the word, always advising a change from city life or crowded living when finances permit.

4th. Teach your patient that a mixed diet is the best and that on the resistance of the patient is based our hope.

5th. That the stomach is the citadel of the patient, hence the necessity of preserving its digestive power.

6th. Use medicine when indicated, but not in a blind way. Treat what you can do good to, but let alone what you know you cannot help. Make use of nature's great vitalizer the sun, in connection with which always employ its hand-maid, "Fresh Air."

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P. L. Thibaut, M. D., Chairman.

On the Importance of the Simpler Physical and Psychical Methods of Treatment.

By WILLIAM SYDNEY THAYER, M. D.,
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In accepting the kind invitation of your President to speak before you this evening it has occurred to me that it may not be out of place to express a few thoughts with regard to the importance of certain simpler physical and psychical methods of treatment of disease. That which I am about to say may seem trite to many in this audience, and yet, although conditions to which I am about to refer are tacitly recognized by many, nevertheless, as a profession we have been rather slow to meet them as we should. We must all agree that the end of the efforts and studies of the physician should be to prevent, heal or ameliorate disease—to further and perfect the *art of medicine*. And while recognizing our inefficiency and helplessness in many respects, we must realize what enormous advances have been made in recent years. If one looks back, however, at the history of medicine during the last century he cannot fail to be impressed with the fact that the first nine decades of the nineteenth century, associated as they were, with progress in the medical sciences, such as has rarely been recorded in a like period of time, were yet not to a like degree fruitful in advance in the *art of practice*.

Based on the anatomical foundations laid by Morgagni and Bichat and extended by such men as Muller, Schultze and Virchow, a brilliant line of students, Auenbrugger, Laennec, Corvisart, Skoda and others introduced accurate methods of detecting changes in organs and tissues *intra vitam*. At the same time their associates and followers, Bright, Addison, Bouillaud, Schonlein, Louis and

Trousseau, not to speak of their numerous living students and successors, by careful and accurate clinical studies, laboriously correlated with the anatomical appearances at autopsy, developed a degree of diagnostic exactitude which transformed medicine. And this period of anatomical study was associated with and followed by the great awakening in physiology and experimental medicine started by Magendie and continued by Claude Bernard and later by the brilliant bacteriological and parasitological studies initiated by Pasteur and Koch, and by that progress in physiological chemistry which is throwing day by day more light upon the functions of the human body in health and disease.

But throughout the greater part of the last century it must be acknowledged that, the mind of the bulk of active scientific investigators was occupied with the anatomical, physiological and bacteriological study of disease, and the clinical application of their methods and results to *diagnosis*. At the same time a realization of the folly of the old, blind expectations as to the specific action of many drugs and the possibility of influencing regressive structural changes by medicine, brought about, it must be acknowledged, a certain therapeutic pessimism. The medical world became more and more interested in *sedibus et causis morborum* in which discoveries were daily made, than in an attempt to detect new methods of treatment. Some of our medical clinics became, as has been said, great diagnostic institutes.

While among the wiser members of the profession this interest in pathological anatomy and bacteriology and chemistry, in the scientific study of disease; and this realization of the folly and vanity of random experiment on the human being with new drugs with the expectation of finding new medicines with specific action, brought about only a judicious conservatism in practice, yet, in other less well balanced minds, an over-powering interest in one side of the question led to a lack of that attention to the details of the art of healing which, after all, is the final duty of the physician to his patient.

But it cannot be said that the condition of the patient suffered. In those very clinics which were most criticised and most vehe-

mently accused of therapeutic nihilism the treatment of the patient was steadily improving. The delivery from poly-pharmacy, the employment of the simpler physical means of treatment, instead of constant, aimless experiment with drugs, with the action of which we were wholly unfamiliar and which more often than not were harmful rather than beneficial—these were great blessings. But the tree of medical science has not yet begun to bear its first fruit of real improvements in the art of healing. In the last twenty years, however, great changes have come to pass. The introduction of scientific methods of study into certain branches of medicine have inevitably brought about habits of more exact thinking in other branches. Let us consider for a moment some of the changes which have been taking place in the practice of medicine as a result of the development of more scientific methods.

(1) As I have already said, men trained in exact methods of thought and action could not fail to realize the folly and danger of an indiscriminate use of drugs. Several years ago while reading, on a railway train, a book lent me by a distinguished teacher and master, whose name many of you may guess, I found on a slip of paper between the leaves, the sketch of a thought upon this very question which expressed well that which we should feel. What surprising and unlooked for reactions might occur if we were to drop chemicals at random into a glass found standing in a laboratory and containing a fluid of unknown constitution? We might well hesitate to risk the experiment. And yet, as physicians, we have been in the habit of introducing thoughtlessly into the complex chemical fluids of the body, an infinite variety of substances with the nature of which we are too often unfamiliar, without the least conception of what far-reaching evil effects our act might have. This may seem an exaggerated statement. But let me take one example. Nearly twenty years ago, a new antipyretic, highly recommended—as they always are—was placed in the hands of the profession. This was used on a number of patients in the wards of a large hospital. Ill effects were soon noticed. Experiments were made upon animals and the drug was found to be one of the most powerful destroyers of the blood with which we are familiar. Only

a few months ago it was chosen by one of my colleagues as the best type of poison to administer to animals for the purpose of producing experimental anemia, in order to study the regenerative changes in the bone marrow. Its constitution was not unlike that of other antipyretics which are relatively harmless in their effect, and to its thoughtless use in different parts of the world we cannot doubt that many human lives were sacrificed. The harm which may be done by the pointless and careless use of drugs often outweighs any possible advantages. We are coming to realize that as far as possible we should use only drugs the physiological action of which we understand, and which can be easily controlled. We must, as physicians, know what we are doing and consider carefully before entering on medical experiments. An experimental physiology and pharmacology are reproducing and solving for us many a problem which, in the human being, would be difficult or impossible to approach.

(2) One of the first and most brilliant advances in therapy dependent upon careful physiological study and observation was the introduction by George Murray of thyroid feeding in the treatment of myxedema and cretinism. It is true that no similar animal extract has as yet proved of like efficacy, but the discovery has opened a hopeful field for future study and the recent observations of MacCallum concerning the use of the extract of parathyroid glands in tetany, may prove of almost equal importance.

(3) Consider again the immense progress associated with the development of the use of the anti-toxine of diphtheria and to a lesser extent that of tetanus; with the hopeful action of preventive vaccines against typhoid fever, cholera, dysentery and plague, and the studies upon opsonic immunity—the opening of the whole field of specific serum prophylaxis and therapy.

One must with regret, pass with a mere word of reference the wonderful results of preventive medicine in yellow fever, malaria, plague and cholera, which have been achieved through systematic scientific study of the nature of these diseases, their mode of transmission and the conditions under which they prevail.

(4) The fascinating investigations of Ehrlich and his students as to the manner of action of various chemical substances in differ-

ent infections give us ground for hope that ere long principles and laws may be discovered, the therapeutic value of which we cannot today estimate. Everywhere there are signs of re-awakening, of therapeutic enthusiasm—an enthusiasm based on the fact that the seeds which science has so patiently and sedulously sown are germinating and bringing forth a new therapeutic art, born of research and experiment, accurate thinking and reasoning—widely different from the blind empiricism of the past.

(5) Almost equally important, though not perhaps as brilliant as these more specific measures, is the awakening which is gradually coming over the profession with regard to the enormous therapeutic reservoir which we have in the rational and carefully planned application of the more simple physical and mental methods of treatment. Few of us often consider the part that the pure physical and psychical methods of treatment play in the care of the great majority of maladies which come under our observation. It is no exaggeration to say that these methods are the most important that we have. The difference between modern therapy or we must probably say, the therapy of the near future and that of the past, is going to be, it seems to me, largely the difference between using these methods blindly and without a realization of what we are doing on the one hand, and on the other, of applying them intelligently and with a full conception of the opportunities which lie before us. As it is, we are only beginning. We often forget and neglect.

Let us take a few examples and consider that which we do and that which we might accomplish.

If one of us be tired and worn out from loss of sleep, what do we do? Is our first act to take a tonic? No. It is, if we can, to rest and sleep.

If, from overwork and strain, we find ourselves nervous and perhaps sleepless, what do we seek to do? To take a hypnotic? No. If possible, we take a vacation. And we know that if we can get away from the hurry and cares of daily duties we shall recover immediately. The tonic and hypnotic are makeshifts—and sometimes dangerous makeshifts.

If there come to us a woman who, in the same way from constant strain and care, added it may be, to an inherent instability of body or mind, has become worn out, introspective, neurotic and unable to control herself, do we not to-day realize that in the majority of cases that which will best start her on the right path is to separate her from her surroundings, to put her to bed, to give her a trained nurse who shall have had experience in caring for individuals in like nervous or mental conditions; to carefully re-educate, as the popular term now is, the digestive functions, by beginning with the simplest and most limited nourishment, gradually progressing until the patient, without realizing the fact, is taking a full diet; by the induction of medical obedience; by constant and carefully planned mental encouragement and stimulation, and later, by exciting the patient's interest in some bodily or mental occupation, to take her mind from herself, while at the same time, by the use of massage, baths, packs, and perhaps, electrical treatment, the skin is kept in good condition and the muscles in such a degree of nutrition that when she again seeks to use them she may find herself reconstituted in body as well as in mind. That is what the Weir Mitchell rest cure, lately so ably set forth by Dubois, means. When, after two or three months the patients, as they often do, return better and stronger than they have been for years, we hardly realize that the treatment which they have received has been purely physical and psychical, that those medicines which have been employed, if indeed, any have been employed, have played a wholly secondary part.

Again, let us consider the conditions in typhoid fever. We have for some time realized well enough that it is useless to attempt to treat locally and by internal medication that which long before the time it is recognized, has been a general septicemia. To expect to cure typhoid fever by disinfecting the intestinal tract, even if it could be done, would be just as absurd as expecting to cure a case of secondary syphilis by local treatment of the cutaneous manifestations. What do we do? The first thing on which we insist in the treatment of a case of typhoid fever is physical rest, that the heart and muscles which are already weakened by the circulating

toxic substances may not be overstrained. We regulate the diet so that the patient may be supported as far as may be, that the loss of body nitrogen may be kept at the lowest possible point, while yet avoiding such nourishment as may in any way, interfere with the somewhat impaired digestive processes. We use cold water in the form of baths or spongings or packs for its remarkably stimulating effect on the general mental and nervous condition of the patient, and for the apparent benefit which results from the coincident lowering of the temperature. But what we often forget is that such baths and spongings should always be associated with careful massage. It is one of the commonest defects in our treatment of typhoid fever and other prolonged maladies, rebrile and afebrile, that we forget to look out for the condition of the muscles. We should never think of putting a neurasthenic upon a prolonged rest cure without insisting upon massage and hydrotherapy in its various forms in order to prevent the atrophy which follows long disuse; but in these other conditions in which, as in typhoid fever, there is greater muscular degeneration as a result of the toxemia, we too often entirely forget the great importance of massage, and abandon it, if it had been given, with the falling temperature and the discontinuance of the baths. Every typhoid fever patient, after his temperature has fallen, should still have at least one alcoholic sponging associated with thorough general massage daily. It is surprising to see the difference in the strength of a patient with pneumonia, for instance, who is given careful general massage as soon as his temperature falls to normal, and that of the man who spends his convalescence entirely at rest. The one finds his legs strong and ready to bear him; the other, with a heart weakened by disease, finds his muscles far less able than they were before to support him; extra effort is required, more strain upon the heart, and the process of learning to walk again is a far more serious matter. There is, it seems to me, really greater need for proper attention to the muscles in typhoid fever and in convalescence from pneumonia than in the treatment of a neurasthenic.

The same applies to the treatment of patients with all manner of surgical injuries. The difference between the condition of him

whose muscles have been carefully attended to and that of his fellow who arises with a general atrophy of disuse is enormous and can be appreciated only by one who has seen the two conditions.

Consider for a moment the treatment of diseases of the heart, muscular or valvular. Rest and regulation of the manner of life of the patient are here the essential features—medicines should be the last resort. There are conditions of lack of compensation in which rest alone is of course insufficient, and where the brilliant effects of digitalis, diuretics and purgatives are happily familiar. But excepting at such a period, the problem in the great bulk of conditions associated with weakened heart, is another. It is a question of bringing the heart back into training. The task before the patient with a dilated heart differs from that which is to be met by the young man who is training for a race only in degree. On the one hand, it is a question of taking steps to prepare normal muscles and a normal heart to withstand extraordinary effort. On the other, it is to prepare a weakened heart to bear burdens which, for a healthy man, would be normal. The brilliant results so often obtained at Nauheim and elsewhere by the application of those measures elaborated by Schott and others, which consist simply in lessening the burdens of the heart through the baths and by gradually training it to increased effort by means of carefully graduated and progressively increased resistance movements, show how much can be accomplished by the simplest physical measures when carried out in an exact and painstaking manner, according to a carefully laid and scientifically controlled plan of action. Only with loss of compensation—that loss of compensation which may be so long delayed by purely physical methods of treatment—do we fall back upon digitalis to save the day. And at the very end, when digitalis has failed, it is the lancet which gives the patient a new lease of life.

Let us consider again the treatment of a colitis, say an amebic dysentery. The first necessity is absolute, complete physical rest. Next, regulation of the diet, and lastly, the question of medicine; and medicine by the mouth as we so well know, is of little value here. In the end it comes to the use of irrigation of the colon with simple water judiciously medicated.

Similar considerations apply to the treatment of pulmonary tuberculosis. In no disease have so many drugs been employed; in no disease have so many fantastic methods of treatment been advised; in no disease are the essentials so well met by the careful carrying out of simple physical and psychical methods. Absolute rest, especially if there be fever. Freedom from care and responsibility. Careful attention to the diet. Life in the open. Above all, the placing of the patient in a position in which, from a mental standpoint, he may be encouraged and stimulated. In no disease is attention to the environment of the patient—the importance of which has been so ably emphasized by James—more necessary than in pulmonary tuberculosis. Year after year hosts of poor consumptives go forth in search of that far off climate which, alone and unaided, is to bring them back to health. As well might they seek the fountain of youth! Allured by the enchantment of distance, they abandon the comforts of home, the restraining influence of wise advisers, the encouragement of companionship and example, for a cheap boarding house, or the solitude of the plains, and strangers in a strange land, homesick and doubting, writing thousands of miles for the advice which should be near at hand, they die in the midst of that paradise of which they had dreamed for the want of the hundred little physical attentions and mental stimuli which are the most important elements in the care of the tuberculosis patient. The psychical stimulation associated with treatment in sanatoria is not the smallest element in its success.

One might go on through the whole list of human ills, not excluding those for which we happily possess drugs with specific effect. Indeed, it may be worth while to refer briefly to the necessity of attention to the simple physical and mental side of the treatment of disease such as syphilis and malaria, types of these latter maladies. I think of a specific instance, a colleague who consulted me some years ago, with grave involvement of the central nervous system following accidental luetic infection in the practice of his profession. Despite vigorous treatment he had grown progressively worse. The outlook seemed almost hopeless. But it was noted that he had attempted to combine the treatment with attention to

his daily duties. It was insisted that he leave home, take to his bed and put himself under the absolute control of a wise physician and nurse. Six months later a robust, healthy looking man entered my consulting room; I had not known him. The medication had not varied essentially from that which he had given himself, but the physical rest, the freedom from care and responsibility, the attention to his general bodily condition, and the mental encouragement and stimulation had turned the scale. 'Tis a common picture.

In like manner we are all familiar enough with the ease with which the milder forms of malaria may be treated, if the patient be willing to spend a few days away from work and at rest, how much smaller the dose of quinin need be to accomplish a good result, as well as with the necessity of rest in the treatment of the severer forms of the disease.

It is undoubtedly true that wiser physicians always have recognized and taken advantage of these facts. True success in practice is usually dependent upon the attention of the physician to the little physical and psychical details of his work. But the world at large takes a very different view of the practice of physic and it is ever amazing to see how deep rooted is its faith in medical magic. Nevertheless, the public is slowly and half unconsciously beginning to appreciate these things. One of the most interesting evidences of this is the rise and development of the trained nurse. What does the patient mean when he says, as he so often does, that, after all, a good nurse is more important than a physician? He means that the measures carried out by that trained nurse; the care she has taken of his skin, his muscles; the judicious preparation and administration of his diet; the little attentions which promote his general physical comfort; the confidence inspired by her cheerful and tactful behavior, have had more to do with his recovery than any other prescription that the doctor has given him, and he is right.

And what does our increasing dependence on the trained nurse mean? It means simply that we know that physical and psychical details of treatment are the most powerful measures which we can apply in our efforts to bring our patient back to health; that

we have in the nurse an individual highly trained in the application of these measures. What indeed, is the secret of the success of that gentry who use their hands so much better than they use their heads, the so-called osteopaths? Is it not in great part that, by practice and experience, many have become fairly skilled masseurs whose treatment is of real value to the admiring patients whose "dislocated" vertebræ they so marvelously manipulate?

But why have I dwelt so long upon these rather simple points? Because, it seems to me true that although many of us may realize where our power lies, we have been delivering over the application of these important methods of treatment to the trained nurse and to the surgeon, while standing aloof, in some instances with a traditional and pharisaical pride in the thought that we are not as the osteopath, we use our heads only, not our hands, an attitude which is a fatal stumbling block to progress in the *art of medicine*.

Must we not on reflection, be painfully conscious that, not one of us has ever been properly instructed in massage, and that few of us are familiar with the many ways in which hot and cold water may be used to advantage? And if, indeed, one have worked in a part of the world where methods of physical therapy are properly taught, where is he to find the establishment in which his prescriptions can be properly carried out?

The tired business man consults us in the summer. He cannot take a vacation; he has no horse. The Country Club, where he might take several afternoons a week of golf which would do him so much good, is too far away. A few hours a week of suitable hydro-therapy and massage and Swedish movements would give him an excellent substitute for the life and exercise in the open which is the medicine that he needs. But what have we, as a rule, at hand? Only the Turkish bath which is often far too exhausting for a man in his condition, and the charlatan who poisons his mind and plunders his pocket.

In one city an interesting beginning has been made. A few years ago several members of the medical profession recognizing the need of an institution for hydro-therapy, massage and other methods of physical treatment, succeeded in raising a moderate sum of

money as a result of which suitable rooms were obtained and fitted out with a thoroughly satisfactory system of baths. A male and a female attendant were appointed, each thoroughly trained in massage and Swedish movements. The establishment was put in charge of a young physician who was well qualified by study and experience. The institution is open in the morning for women, in the afternoon for men. The physician, under whose general charge the establishment is placed, who, by the way, is an active man in all respects, a teacher and an investigator, has published a small pamphlet with a description of the various methods of hydro-therapy and the conditions under which they may be best applied. A patient may be sent with definite prescriptions for whatever treatment may be desired, and this is faithfully carried out by the attendants. A moderate fixed fee is charged for each treatment. After two years the establishment became self-supporting and now it is making a good income, which might well, some day, be applied toward the establishment of a department for thorough instruction in methods of physical therapy in a neighboring university. I wish that I might say that this institution were in Baltimore.

In general, however, we are sadly behind our colleagues on the continent. In connection now with many of the better hospitals, there are properly organized institutes for physical therapy, institutes to which a patient may be sent for massage, for the various forms of hydro-therapy or for fitting exercises. I know but one hospital in this country which has a thoroughly developed department of this sort. At the Massachusetts General Hospital, through the generosity of a lady in Boston, there is a complete set of Zander apparatus which has been of the very greatest assistance, while of late a system of baths has been added.

That upon which I would particularly insist is that we are neglecting a very important feature of medical education. We should give more time in our schools and hospitals to instruction in the *care of the patient* in its more literal sense. Courses should be given to students in the essentials of nursing. The student, as well as the nurse, should be trained in massage, in Swedish movements, in hydro-therapy, in electric-therapy. Few physicians in

active practice may have time to give massage personally. But many a young man could accomplish much were he able to give proper massage and to direct specifically suitable measures for the physical development of the tired, nervous patient who now receives, if he is lucky, a little advice which he cannot carry out and a prescription for tincture of *nux vomica*, or, all too frequently, alas, a depleting diet and an elaborate course of medicinal treatment directed at his poor stomach, which tired with the rest of his frame, has happened to attract his special attention and has been made the scapegoat.

If this be true with regard to the simpler physical methods of treatment, how true is it also in connection with the psychical influence which the physician should exert on his patient. As has been said above, true success in practice has always depended on the attention of the physician to the little physical and psychical details of his work. The encouragement, the stimulation, the mental lift which the good physician gives to his patient are the most important elements in his practice. This you may say is nothing new. No, indeed, it is probably as old as man; and as has been said, many thoughtful, conscientious physicians fully understand it. They realize that the good which they accomplish depends not so much upon the contents of their prescriptions, as on the time which they give to their patients, or the honesty and simplicity with which they explain to them the nature of their condition, and the earnestness, with which they give of their own store of common sense and reason and optimism to the doubting and anxious invalid.

But do we always reflect that this power of suggestion, this mental control which the physician should exert over the patient is not universally comprehended? And is it not true that, before our students, we rarely insist upon such matters as clearly as we ought? We are rather accustomed to expect them to absorb these conceptions by intuition, and the results are sometimes odd. I think of an amusing example which may serve as an excellent illustration. A young woman left a medical school at the end of her third year and became a Christian Scientist. When asked the cause of her action, she is said to have replied that she had discovered that her

professor of medicine, a most successful practitioner, was after all, nothing more than a faith healer and that she therefore felt it useless to go further.

Another instance of the lack of appreciation and realization of the most important powers which the physician can exert is the manner in which some of our colleagues tend to look upon the modern revival of interest in the analysis of the mental phenomena of disease and the more studied application of psychical methods of treatment. They seem to regard the rather ponderous and impressive term "psycho-therapy" as the symbol of some wholly new and mystical method of treatment.

But the awakening of interest in the study and application of psychical methods of treatment is important and hopeful, and not its least importance lies, perhaps, in the fact that we are reminded that many have forgotten to teach their students, some have failed to realize themselves, that by the mental control which we gain over our patients we can often accomplish more than by any other means.

The so-called "Christian Scientist" has discovered this, finds for himself a satisfactory explanation in his circumscribed religion, and with simple ignorance of the elements of the natural sciences, constructs a grotesque system which, while helping some, leads many astray.

Many of our so-called Homeopathic brothers must realize well that it is rather their confident assertions than their dilutions that tide their patients over the passing malady.

The quack, having made peace with his conscience, knows that, by his fantastic advertisements and ludicrous promises, he will always gain the confidence of and actually help a sufficient number to keep his pocket padded, the main end of his existence.

The maker and advertiser of proprietary medicines knows that the false statements printed on his bottles inspire a confidence that is of benefit to some, that the statements are false, that they cruelly deceive many, he may perhaps not consider.

But the physician does not always realize that that which superstition and ignorance and ill faith may accomplish, he too, can do

equally well by properly directed effort, honestly and intelligently, and, if you will, scientifically.

Just as it is true that the general practitioner is called upon, as a rule, to apply only the simpler forms of physical therapy, so it is with regard to methods of psychical treatment. In all those conditions in the treatment of which the mental influence of physician on the patient is especially called into play, the individual is a most important factor, and it will probably always be the case that, in the graver nervous and mental maladies, the best results will be obtained by men especially gifted and specially trained. But many a patient might be saved from a long nervous breakdown or from the hands of the quack and charlatan, if we were to remember, ourselves, and to teach our students to give more time and thought to the care of the mental attitude of the sick. An hour's patient attention and explanation and encouragement will often do more for the sufferer than months of routine treatment.

These, gentlemen, are the conceptions which I have wished to bring before you. They are neither new nor original, but they have, nevertheless, a bearing of some importance on the practice of medicine.

It is, of course, needless to add that, if I have insisted upon the value of more studied attention to physical and psychical methods of treatment, it is not that I would in any way detract from the value of drugs or deny the necessity of a thorough knowledge of their physiological action. Drugs are, of course, indispensable in the practice of medicine. To say that there are few specifics and to warn against the indiscriminate use of substances of uncertain constitution, is far from denying the value of medicines. It is only by knowing how to take advantage of every current, to catch every passing breath of air that the skillful yachtsman wins the race. The administration of a drug, intelligently, at the right moment and in the right manner may tide the patient over the crisis which had otherwise been fatal. But it is none the less true that had it not been for other vitally important physical and mental measures this opportunity might never have been offered.

Diphtheria.

By J. E. KNIGHTON, M. D., Homer, La.

Diphtheria is a disease that those of us who practice in the country towns do not have to deal with to the extent that it is met with in the cities, but it is of extreme importance that we keep in mind the fact that we may have it in any locality and that to recognize its presence early, often means a life saved, that a few days delay would place beyond the reach of any remedial agent.

It is therefore very important that we make critical examinations of suspicious cases at the earliest possible moment.

The symptoms both local and constitutional vary greatly in extent and severity in different cases. As a rule the onset is gradual, with slight sore throat for a day or two and with but little elevation of temperature. While this is the rule the onset with young children may be more abrupt, being ushered in with chilliness, vomiting, high temperature and sometimes convulsions. In many cases there is such a small area covered by pseudo membrane that, without a close inspection, it may be overlooked. After the first day or two, the symptoms, both local and general, become rapidly more pronounced. The temperature is high earlier in the course of the disease, now becomes low, sometimes even subnormal, due to depression from absorption of toxins. The pulse is rapid and weak. The pseudo membrane spreads rapidly over tonsils, fauces, uvula, pharynx and often to the mucous membrane of the nose. Sometimes this pseudo membrane extends from pharynx to larynx and trachea, producing the pharyngo-laryngeal type, while in the true laryngeal type there may be no membrane visible above the larynx.

The disease from which we are most often called upon to differentiate diphtheria, is follicular tonsilitis. The onset of follicular tonsilitis is usually rapid, while the reverse is usually true of diphtheria. The cervical glands are involved earlier and the swelling is greater than in tonsilitis. The pseudo membrane of diphtheria is often located at first only on one tonsil, which is a very rare condition in follicular tonsilitis, the deposit of this disease being found in a great majority of cases on both tonsils, in

about equal proportions. In tonsilitis the deposit is first in the crypts while in diphtheria, it is more likely to be first seen over the more superficial portions of the mucous membrane. The pseudo-membrane of diphtheria does not confine itself to the tonsil but is soon found spreading over the fauces, palate, uvula and nasal mucous membrane. A very valuable point to remember is that false membrane seen on any of the above named structures, other than the tonsils, is very significant and usually may be regarded as diphtheritic.

Anders says albuminuria is a constant symptom of diphtheria and is almost as certain in establishing a diagnosis of true diphtheria as a bacteriological examination. It is met with only in exceptional cases of follicular tonsilitis. Of course the only means of absolute diagnosis is the finding of the specific bacillus under the microscope. But as many of us do no microscopic work and are not located convenient to a laboratory, we must rely more on the symptoms and signs as we find them. Even in the city where the laboratory, with the expert microscopist is at the service of every physician, it is usually twelve to twenty-four hours before reports of their findings are received. This is too much valuable time to be lost, and hence a diagnosis must be made and the proper treatment instituted earlier.

It would be useless for me to dwell at length upon the treatment of diphtheria, but with reference to treatment will notice briefly a few cases of the laryngeal type, that have come under my own observation. During the past eight years, it has been my misfortune to meet with seven cases of laryngeal diphtheria. The first three of these cases were fatal while the last four recovered. The principal features of treatment of all these cases were the administration of antidiphtheritic serum and the inhalation of vaporized calomel. With the latter four cases, the serum was given in much more liberal doses, one case (a child of fourteen months) receiving ten thousand units during a space of eighteen hours. While there was no bacteriologic examination in any of these cases, I am of the opinion that they were all true diphtheria, and that had the specific treatment been pushed more vigorously with the first three cases, the results might have been different.

The one thing of supreme importance in the treatment of diphtheria, in any form, is the early and liberal use of the antidiphtheritic serum.

DISCUSSION.

DR. A. J. PERKINS: When you make your diagnosis of diphtheria, use antitoxin; when you are in doubt, use antitoxin.

DR. LAZARO: Of course no one would, in view of the statistics, treat diphtheria without using antitoxin early and repeatedly if necessary. I have also used in addition and with advantage a combination of carbolic acid and compound tincture of iodine internally, well diluted and given according to age, every four hours. I began using this combination several years ago, when the opponents of antitoxin had a following and claimed that its good effect was due solely to the carbolic acid in it. At that time compound tincture of iodine was also a favorite in all septic conditions. My results were so good that I kept it up with the addition of the serum. I always precede this with a large dose of calomel and soda, followed by a dose of castor oil and turpentine four hours after. Locally I prefer peroxide of hydrogen.

DR. R. G. HAWKINS: Of course antitoxin is the proper treatment, but sometimes we haven't got it and cannot get it, and in such instances I have frequently used local applications of 50% strength of carbolic acid, swabbing the throat with it every day for about four days.

DR. GREMILLION: I have had very few cases of diphtheria in the past few years, but antitoxin has always given satisfactory results. In all suspicious sore throats I do not feel at ease until I have used antitoxin.

DR. KIMBELL: I would like to ask whether any of the members of the Society have observed that the antitoxin is to be administered in larger doses when there is a secondary syphilitic condition than otherwise. A young man I had developed diphtheria. He was in the secondary stage of syphilis, and we administered 120,000 units of antitoxin. I would like to know whether it is a rule that secondary syphilitics require an extraordinary amount of antitoxin.

Two other cases of diphtheria in syphilitics required large amounts of serum to control the disease.

DR. ELLIOTT: I do not know diphtheria by sight. We used to have an idea that if a child took sick suddenly with a high fever and a spot on the tonsils it was tonsilitis; it frequently is. Frequently, also, it is diphtheria. I do not pretend to be able to tell it. Now, if I see a case is serious, I give antitoxin and come back the next day. I give them the antitoxin while I am in the house, and I make a culture. If this is negative, I am all right; if positive, I am all right still.

DR. DEMPSEY: The following formula can be used in the city or in the country when you cannot get the antitoxin.

R. Kali chloratdr. $\frac{1}{2}$
 Tinct. ferri chlor.dr. 1
 Glycerindr. $\frac{1}{4}$
 Aquæ dist.Q. S. oz. 3
 M. Sig. Teaspoonful in $\frac{1}{4}$ glass water as gargle, spray,
 or application.

I have used the above with very beneficial results until such time as antitoxin could be procured.

DR. THORNHILL: I should like to emphasize the importance of the point made by some of the speakers, of giving your patients the benefit of the doubt in every doubtful case of diphtheria by giving them antitoxin. When I am called to a case of diphtheria, or one that I have reason to believe may be, I do not consume time trying to make a positive diagnosis. Experience shows that in pseudo-diphtheria due to streptococci, staphylococci and other non-specific bacteria, antitoxin does good, so if I am assured I am dealing with diphtheria I give antitoxin and if I am in doubt I give antitoxin. Certainly we should all not only desire but strive for the highest possible degree of scientific accuracy in everything that pertains to medicine but more especially in matters of diagnosis, but in our efforts to be scientific we should not lose sight of the safety and welfare of our patients. My friends frequently ask me if antitoxin is not my last resort. I tell them no, it is my first.

Armed with antitoxin I now approach diphtheria with something of the same confidence I do malarial fever with quinin.

DR. A. J. MEYER: Out in the country where we have few cases it is not always easy to get antitoxin. I had a very sad experience a few years ago. I lost two of my children with membranous croup with apparently no follicular patches on their tonsils whatever. My oldest child, four years old lost her voice completely on Wednesday. This was eight months before the first mention of antitoxin was made, in 1894. I treated the case at first, thinking it would be spasmodic, but within a few hours the condition got much worse and brother physicians were called in. That child, with the treatment we used at the time, died in four days. I thought it was membranous croup, but it was diphtheria. I did not realize that the cases of membranous croup were diphtheria, but today I believe them the most dangerous cases of diphtheria. I think if we have membranous croup and use antitoxin, we will get good results. I lost my two little girls. The second one I brought here to the city and she died in seven days. The little baby boy was nursing at the breast. A few days after burying the second child, I noticed a little patch on his tonsil. I began the treatment at home, and started for the city at once. I used peroxide of hydrogen. I felt sure the case was going to terminate as the others had. The membrane was sent to the laboratory and was returned with positive diagnosis of diphtheria. We gave chlorate of potash and tincture of iron every two hours, also quinin. The life of the child was saved without antitoxin as is done many a time. At the same time, at the present stage of development in the use of antitoxin, we should use it quicker.

DR. McVEA: Without any reflection on the doctor who has just taken his seat, I had quite a sad experience, although not quite as sad as he had. This was about six years ago. We did not have any antitoxin in Baton Rouge, or did not have any dose larger than 1,000 units. My little girl developed a case of diphtheria, and that experience taught me, and this is the point I want to make, that while all of us have heard of and used other remedies for diphtheria, there is but one remedy and that is antitoxin, and

there is absolutely no excuse nowadays for not having antitoxin. Any doctor can carry two or three thousand units. It keeps many months. That experience taught me that it was necessary to have it, and since that day Baton Rouge has always had it. Antitoxin is the only remedy and there is no excuse for not having it.

DR. CRAIG: Speaking of membranous croup; eyars ago, in my early practice I looked upon it as one of the most fatal diseases I had to deal with—almost all the cases which I met proved fatal. I was not alone in that experience. It was the usual experience of physicians at that time. Lately I have treated all cases showing diphtheritic condition whatever, with antitoxin and with *success in every instance*. That is the important point I wish to bring home.

DR. SEAY: I will have to take issue with Dr. McVea in regard to the treatment of diphtheria. I believe that antitoxin is very valuable, but I cannot say other treatment is not good also. I have used it in a great many cases and with success, but I have treated the disease successfully without antitoxin, and in the country where we cannot always get antitoxin we have to treat it without antitoxin, and we do so successfully. I have kept it for four years on my shelf, but had only one case during that time. Where the symptoms are mild, I do not, in every case, use it. A question I would like to have more information on is as to how long antitoxin can be kept. I have had some for years upon my shelf. Is it still fit for use?

PRESIDENT BRUNS: Without leaving the chair, I think something should be said *ex cathedra*: The day is past when cases of diphtheria are to be treated by anything but antitoxin. It is only encouraging the sacrifice of young lives to allow any other doctrine to be preached at this day.

DR. KNIGHTON in closing: I heartily concur with the gentlemen who have said whether positive in the diagnosis or not, use antitoxin.

A Case of Arthritis and a Case of Pleurisy, both not Rheumatic, and not Gonorrheal, not Tubercular.

By DR. E. M. DUPAQUIER, New Orleans.

CASE OF ARTHRITIS. On Nov. 16, 1906, I was called to attend Mrs. C. B.—. Born in New Orleans, age 30, white, married. History negative, up to a few months after the birth of her only child, when she began suffering from her joints, with but short periods of remission.

When I saw her for the first time, she was suffering from her left hand and right knee: Back of left hand was swollen, inflamed, middle metacarpo-phalangeal and wrist joints chiefly involved. Right knee swollen, inflamed. Temp. 101°.

Though she had taken a number of salicyl preparations, without relief, I, at once, thought of applying a salicyl test, myself. Accordingly, the next day, I started with Martinet's solution by the mouth; no response. Nov. 20, 1906, I injected, hypodermically 5 c. c. of Mendel's solution. I repeated it; no response. I concluded it was not a rheumatic case. I applied, at the arm and at the thigh, the rubber band, for hyperemia, and relieved her some.

I asked her husband to call at my office. He denied having ever had gonorrhea and willingly submitted to an examination. No discharge, testicle, epididymis, prostate were normal; no prostatic threads in the morning urine. The woman also submitted to the examination of her genito-urinary organs. Result negative, save a leucorrhoeal discharge, the microscopic examination of which proved negative.

I advised hot douches. The rubber band and the douches improved her local condition. But, the joints remained slightly swollen and stiff. She looked pale, emaciated, though nourished.

Dec. 1, 1906, fever had disappeared entirely. I applied the tuberculin test. No reaction.

Believing firmly that any septic focus can set up an infective arthritis (Clogg, *Internat. Clinics*, Vol. 3, 16th Series, 1906)—I turned my attention to the only source indicated in this case from which the infection could arise, namely the genital tract.

After a few hot saline intra-uterine douches and swabbing with spirit of turpentine, the vaginal douches being continued, all leu chorreal discharge had disappeared and the last time, Dec. 26 1906, I saw the patient, she was entirely free from her joint trouble. She had taken no "antirheumatic" specific of any kind.

CASE OF PLEURISY: On Feb. 24, 1907, I was called to attend Mrs. G. Born in New Orleans, age 31, white, married. History negative up to a few days after the birth of her fourth child.

When I saw her for the first time, I found her breathing with difficulty, pulse 110, temp. 102°. Short dry cough, pain in the left side of the chest, dullness in left lower third of the chest, from the 8th dorsal spinous process down and laterally from the column to the left posterior axillary line. Distant blowing breathing. Vibrations decreased. Egophony.

There was no indication for immediate aspiration. I waited for the fluid to subside. Dry cups to relieve pain. Patient being robust, I gave her salicyl course originated by Aufrecht, and the drug proved useless; for, it took the usual three weeks, for the effusion to pass away entirely. It was then March 15, 1907. A low fever continued; the woman looked septic. I called in Dr. E. D. Martin to explore the pleura for pus; result negative; blood count negative.

No septic focus could be discovered anywhere. I applied the tuberculin test; no reaction.

While the local condition improved gradually, yet fifty days passed before the patient's general condition began to look favorable. She is, at present, recuperating rapidly, since my attention centered upon the only suspicious spot, whence a septic focus might have given rise to her pleurisy, namely, the genital tract.

NOTES AND REMARKS: The remarks directly related to the two cases reported are original. But, most of the notes bearing on this broad subject are gathered from the perusal of a most thorough review by H. S. Clogg, M. S. (Lond), F. R. C. S. (Eng.), Assistant Surgeon to the Charing Cross Hospital, and Surgeon to the Evelina Hospital for Children London. (See *Internat. Clinics*. Vol. 3, Sixteenth Series, 1906.) The departure from the habit of look-

ing upon most diseased joints as rheumatic enlightens treatment. The sources of infection of the joints are manifold. Besides the ones that are most commonly thought of namely, rheumatism, gonorrhea and tuberculosis, we must not overlook the others namely, syphilis, the acute specific fevers: scarlet fever, puerperal fever typhoid fever, pneumonia, erysipelas, influenza; inoculations of cultures, injections of antitoxic sera and of tuberculin. In addition the point that any septic focus, any toxic focus, can set up infective arthritis or polyarthritis, must be emphasized. Cases were traced to the gastro-intestinal, genito-urinary, nasopharyngeal and oral tracts. All these statements show how treacherous are the popular names rheumatic and rheumatoid.

Regarding pleurisy, the habit of looking upon it as tubercular is misleading. Most cases are such; but, we must not overlook the fact that many are referable to other sources; commonly rheumatism and chronic renal disease are looked upon as primary causes. The case, I reported today, was traced to the genital tract I told Dr. Martin, in consultation, I believed this case of pleurisy was an isolated manifestation of puerperal sepsis and he concurred with my views from the clinical history.

Regarding the salicyl test for rheumatism (see *Internat. Annual*, 1906), I have used Martinet's following combination:

Antipyrin	5 grams.
Sod. Bicarb	6 grams.
Sod. salicylate	10 grams.
Dist. water	10 c. c.
Rum	30 c. c.
Syr. bitter orange	40 c. c.
M. and S.: One tablespoonful as required and Mendel's solution, hypodermically, viz:	
Sod. Salicylate	8.75 grams.
Caffein	1.25 grams.
Dist. water	50 c. c.

of which two grams were used.

We still have to rely mostly on the therapeutic test and clinical evidence.

"Bacteriology is a comparatively young science. There are many difficulties in the bacteriologic examinations of joint diseases. Isolation of organisms from the joints have only been accomplished in a comparatively few cases. In the present status of our knowledge it is impossible to give any accurate classification of cases of non-suppurative arthritis based on bacteriologic researches. Acute rheumatism, for instance, is undoubtedly a disease produced by a definite organism; but, this organism is still under dispute, and until this point is settled, by the way, we have obviously no right to talk of chronic rheumatism."

Depending on clinical experience, we must bear in mind that an injury is not the only cause of a synovitis, as commonly accepted. Trauma certainly can be followed by an infection of a joint; but trauma is only the predisposing cause. Clogg remembers "two cases, the one a shoulder, and the other, a knee, said to have followed some injury. Aspiration of the joint showed the gonococcus in the fluid. A tuberculous joint is not always associated with chronicity. Acute onset may occur in the hip joint and it is usually attributed to an injury." We should always be careful how we accept the history and must not overlook some serious condition by being thrown off our guard by an indefinite account of some fall, or twist, or something of that sort."

A tuberculous joint often occurs in children, but it is often seen in old people. "In fact, it is one of the more frequent manifestations of senile tuberculosis."

Tuberculosis is not always limited to one joint in children. More than one joint can be affected, e. g., "the spine and hip, or a hip and a knee, involved together."

The diagnosis of a tuberculous joint can rarely be determined by aspiration and inoculation experiments.

As to the radiographic appearances, "they are by no means confirmatory, but may at times be suggestive."

The tuberculin test should be employed in suspicious cases. Both the value and dangers of the test have been looked into seriously by a large number of authorities. "Some distinctly deny that there is any danger of lighting up infection which had become quiescent."—

Bear in mind that in all persons suffering from undoubted tuberculosis the test is found not to be positive. It has been found positive in persons not suffering from tuberculosis. We gather from this, that there may be a small amount of danger attending the injection of tuberculin and it should never be employed merely out of curiosity. The test is not infallible, and it is estimated that there is about 10 per cent error in it. Nevertheless in some cases it will be found of use.”—

In the diagnosis of joint disease we too often overlook syphilis. Both the acquired and inherited disease affect the joints. In children seven per cent of diseased joints are syphilitic. The common mistake is to treat the case as one of tuberculosis, “much to the detriment of the joint concerned. Such treatment, if sufficiently prolonged, tends to end in ankylosis and such patients may become permanently crippled with a stiff joint or joints, whereas, if treated primarily for syphilis, the joint would prove to be very amenable.”— Regarding the rubber band for stasis of the arm and leg I have found that in my case the prolonged applications of 20 and 22 hours, originally advocated by Bier, have been more effective than repeated short sittings or applications.

Regarding the various sources whence an infective arthritis may arise it is worth noting that an “unhealthy throat,” “enlarged tonsils” and “adenoids” are given as sources.

Regarding the intra-uterine douches and swabbing applied in both cases, I desire to state that they were not repeated more than twice. Dr. C. Jeff. Miller concurs with the view that in puerperal fever this method of least meddlesomeness is the best.

I have applied spirit of turpentine because it is said to be detrimental to streptococci and staphylococci, as measured by the opsonic index in streptococcal and staphylococcal infections.

Regarding pleurisy by far the majority of us accept the conclusions of Cabot (*Assoc. American Physicians*, 1902).

Doubtless more cases are tubercular than was formerly supposed (*Tyson's Practice*, 1906).

I have recently seen in a child about twelve years old, primary tuberculosis (tubercular deposits), followed by effusion within two

weeks. The mother of the child had pleurisy two years before; and, at the time, Dr. Batchelor and I were seeing her child, she was in the phthisical stage and had, most certainly infected her child. No better clinical demonstration could be had that pleurisy means tuberculosis. But it is not so always. I will show you a big boy, in perfect health now, whom I have repeatedly aspirated, over five years ago. Of course, tuberculosis may appear in the lung and bones, at a later period; but, the connection between pleurisy and tuberculosis, at so late a period may be questionable, in this instance.

Regarding aspiration (see Stevens Internat. Clinics, Vol. 3, 16th series): "by far the majority are impressed with the idea that there is but one treatment for pleurisy with effusion, and that is aspiration. But, it is true that serious pleurisy itself rarely proves fatal, that in the majority of cases resorption of the fluid ultimately occurs. Much saving of time is effected by early resort to paracentesis. Three-fourths of the cases recover within two weeks."— In the case I reported the effusion was very slight; it showed definite signs of receding. So, under the circumstances, aspiration was not indicated save later for pus.

Regarding cupping for pain, I admit that the wet-cup, (artificial leech) is more effective than the dry cup.

Regarding gonorrheal and puerperal pleurisy I admit that but few cases are on record, so far; but, more cases, hereafter, will be recognized.

Pleurisy, like other forms of serositis (Stevens, *loc-cit.*), has a diverse etiology. The pleura can be infected just as the synovial in the joints can be, from any septic focus. Aubry in his treatise on gonorrheal diseases considers the subject of gonorrheal pleurisy and Wurtz, in his clinical bacteriology, reports cases.

Regarding the infection of the pleura, in the lying in period, from the genital tract, it is as plainly a secondary infection as arthritis is, in such cases.

Regarding the salicylic course for pleurisy (see Stevens, *loc-cit.*): "it is chiefly useful in sthenic cases occurring in robust cases and accompanied by sharp pain and high fever. When such cases

are seen early sodium or ammonium salicylate in doses of 4 to 5 grams in the 24 hours, sometimes relieves the pain, lowers the temperature and apparently exerts a modifying influence on the inflammatory process, itself. In other cases, and these constitute the great majority, the drug is absolutely useless."—.

DISCUSSION.

DR. OECHSNER: I am mighty glad that an internist has taken the initiative in sounding the funeral dirge of rheumatism in this meeting. I think we have about definitely concluded that there is no such thing as chronic rheumatism. I think the term "chronic rheumatism" should be stricken out of our text books, and I am not prepared to say that the same should not be said of acute articular rheumatism. In these cases, had the doctor not made careful tests, the diagnosis might have been rheumatism and the cases unless the infectious process had sapped the vitality of the patient, gotten well *after a long time*. It is in arthritis that we must be particularly observant to exclude everything possible before making a diagnosis of rheumatism. We must seek all over the body for a focus of infection. I have in the majority of cases been able to trace the infection to its source. In children it is probably more important that we exclude this bugaboo, rheumatism. Many of these cases are true acute suppurative osteomyelitis, so the results would be disastrous if we made a haphazard diagnosis of rheumatism, where intervention within 72 hours saves the bone and may be the life of the little patient.

DR. HATCH: I think that this is one of the most important things that we have before us at this meeting. But I must say that I do not agree with the doctor in all that he says. In a tubercular joint for instance long before you get any swelling or marked physical signs, you will be able to make a diagnosis by the X-ray. He said that he did not believe that we could diagnose bone disease with X-ray. Now I feel that this is just the class of case where the X-ray is of the greatest value.

In doubtful cases the X-ray will clear up the diagnosis.

DR. DUPAQUIER thanked Dr. Oechsner for the expressions of appreciation of the paper. "Regarding what Dr. Hatch has said

about the X-ray," continued Dr. Dupaquier, "you must know that he is an expert in reading these pictures. He sees things that I cannot see. He is great in this work. In regard to the making of cultures, that is all very well in hospital work, but cannot very well be done in our private practice. This bacteriological work is very difficult."

Charlatanism.

By L. LAZARO, M. D., Washington, La.

The medical profession exists to render a certain service to the community. In so far as it fulfills this service it is worthy of perpetuation and support. If it should fail to render valuable service it should go out of existence. Its value to the community, like the value of any other profession, depends upon the fidelity with which its members serve the interests of their clients. Between a man and his medical adviser the relation is this: The patient places his life in the hands of the physician and agrees explicitly or implicitly to pay him his fee; the physician agrees to employ all his knowledge and skill for the benefit of the patient. Here to apply the rules of conduct recognized as proper in ordinary commercial transactions to the relation of physician and patient is to destroy that relation.

The enemies of the medical profession are those whose opposition is radical and vital, those who would place other interests on a par with those of the patient's or those who would practice or permit secrecy or interest to be mixed with established scientific facts, those men must be called charlatans. There are different kinds of charlatans and the educated are always more dangerous than the ignorant but they all work on the same foundation—the mind. No doubt the mind exercises a powerful influence over the body. From the very beginning of time the sorcerer, the fortune-teller, the interpreter of dreams, the wild medicine man, the mesmerist, the hypnotist, the quack and the charlatan have made use of the client's imagination to help them in their work. Within the last twenty-five years several sects of cures have appeared under var-

ious names but they all do their work with the same instrument, the patient's imagination. Now the regular physician is sometimes accused of working on the mind and he does accomplish a great deal through suggestive therapeutics and right here I wish to draw a distinct line of demarcation between our work and theirs. We resort to suggestive therapeutics in well selected cases, such as the imaginary or in those cases where the imagination aggravates the original trouble, but we do not claim to cure every conceivable human ailment, even cancer and tuberculosis through the application of mental force alone.

Between the medical profession and all interests or individual who oppose it, there must always be warfare. The physician's duty is not to relieve suffering and cure disease only, but I believe that one of the greatest obligations of the physician to the people is to be a teacher. Educate, so that they will refrain from doing those things which cause disease and suffering and understand how to do things that will relieve suffering and cure disease. Civilization has equipped the true physicians with the power and made them the defenders of the race's physical welfare, which is the foundation of their intellectual welfare. With a distinct understanding of right and wrong let us draw a distinct line of demarcation. Let us understand the importance, the severity and the duration of this warfare. On the one side the medical profession springs from the needs of the best impulses of humanity; on the other side the opposition to it draws its life from selfishness, deeply rooted and universal as the life of our people. This warfare commenced before we came to life and it will go on when we are dead and buried. It has been said that the practice of medicine is as old as history itself but the science of medicine is scarcely fifty years old. It may be added the charlatan is older than either and has **always** flourished. The reason is plain and well illustrated by the anecdote of Dr. Abernathy and the quack who was upbraided by the physician for charlatanism but who justified himself by asking the doctor what number out of the thousand men who daily passed his office did he suppose were "intelligent and of sound well balanced judgment" and upon being answered "probably one in a

hundred" replied, "you may have those ten but I will take the nine hundred and ninety fools for my patients, who for their folly deserve to be quacked upon."

In our days filled with progress, one would think that people would learn enough to understand the difference, especially when their health and often their lives are at stake. To the contrary it looks as if there has never been such jumping to false conclusions from unfounded or half examined, ridiculous or untruthful data, never so much false reasoning. To prove it just observe the many "faith cures" and other charlataneries so plain everywhere at the present date. It would seem that educated people, discreet and sensible in other matters of life would not support such fakirs, but I am sorry to state that this is not always the case for we all know that prominent men and often very distinguished men in high offices will become enthusiastic supporters of quacks and will often go so far as to give their pictures over certificates of the wonderful cures made by worthless and dangerous nostrums. One can notice in these certificates of quack's medicines complete disregard of the ordinary privacies of life, something a regular physician could not do without drawing fire from his patients.

The following quotation I think gives a good idea of it and says in part: "In a late number of a popular magazine I see portrayed with all the skill of an expert illustrator, a beautiful young woman with her hair neatly braided down her back and arrayed in a night gown that is a dream, and, like the goddess in N. Y. Harbor, she holds aloft a lighted candle and in the other hand a pill." The import of the picture is the beauty is about to swallow the pill. Beneath the picture is the legend as near as I can remember, "My complexion is perfect because I take one of B's. pills every night before retiring," and upon such a flimsy foundation the entire structure of the "patent evil" is built and so misinformation is spread broadcast. Let us pause just one moment and think of the unfortunates, especially the element whose troubles are largely imaginary, who read and believe these advertisements, of the heavy penalties that they are paying in physical, mental and moral decadence. So much for the patent medicine charlatan.

Let us now consider the proprietary medicines, ethical and unethical. We can have preparations sold under a registered trademark that are strictly ethical but they must conform to the following requirements:—their composition or exact method of manufacture and their physiologic and therapeutic action must be known. The trademark or copyrighted portion of the name must only indicate the responsible maker, thus becoming a guarantee of quality and purity. But when preparations come to you during your busy office hours, copyrighted without definite statements as to chemical composition or method of preparation, when the therapeutic value of such drugs are based not on the general experience of the medical profession but upon alleged results attained by unknown experimenters, generally in the pay of the proprietors, the act antagonizes the fundamental principles of medicine. This is aggressive warfare on the part of an enemy of medical science. Here let me call your attention to the fact that the danger is not from open enemies but from ignorance and treason in our own ranks. The worst evil is not ignorance but ignorance or rascality masquerading as wisdom and posing as authority. The mask must be torn away. For ignorance there will soon be little excuse but for treason we will have to resort to some radical remedy. We need clear thinking and plain speaking. We think it is treason to the traditions and ideals of our profession to scientific medicine and medical organization and that we will not under any circumstances give aid and comfort to our enemies by prescribing and recommending preparations that are not ethical.

I will now call your attention to what I believe to be two great fads to which the superstitious and credulous people are now looking for quick and miraculous relief. I mean Christian science and osteopathy. They have less basis in merit, even than the other frauds which have less than none. Osteopathy is evidently an outgrowth of the old cult of bone setters and has done harm and caused suffering. What if a regular physician or surgeon were to subject a patient to such treatment, he would be mobbed or have to answer to the law for malpractice. To think that in spite of colleges and the vast knowledge harvest of centuries, millions of peo-

ple are yet trying to cure cancer by talk. Why do people allow this? Where is the common sense? Is it possible for a person to possess so much knowledge and so little wisdom? Is it possible that education has rather given quackery deeper root and wider growth? What is the fundamental cause of this condition of things? Is it superstition or is it the fault of the scientist who fails to teach understandingly? Any unbiased analysis of quackery in all its Protean forms will reveal the fact that ignorance, fear and self interest are the forces that keep it alive. Why cannot something be done toward getting rid of quacks? The one answer is this, too many people are interested in the maintenance of quackery. As long as this condition exists, the masses are not likely to learn the truth very soon. How is it to be expected that the masses are to avoid falling into the clutches of the charlatan when prominent men recommend them!

It is our plain duty to enlist in the struggle for humanity. Let us start by encouraging organization and co-operation of the medical profession with these two objects in view: 1st. To define, maintain and enforce a high standard of professional ethics.

2nd. To increase and diffuse medical knowledge among the profession. Let the lonely physician in his daily practice seek by every means to educate the public concerning the powers and limitations of the human organism and the possibilities and not assumptions of medicine. Let him make the people understand that the only aid in disease must be the result of scientific attainment, based upon knowledge of and the stable laws of nature. It is the duty and privilege of all who hope for the advancement of mankind to impress the simple faith that there is no short cut nor royal road to success, but only a steady up-hill step, holding fast the ground won toward the truth in all things, as the patient effort of man may win by the study of nature.

I believe Dr. McCormack of Kentucky is doing good work in the way of educating the people. He started on the idea that physicians come so closely into the daily lives of all the people that all classes can be interested and brought into active sympathy with everything that concerns the scientific, social and material welfare

of the profession, if these matters be presented in plain simple language. At first a common meeting for the profession and the public was held in each locality, but the scope of the work broadened so rapidly that it soon became a fixed procedure to hold a meeting for the profession in the afternoon and for both the public and the profession in the evening. He considers the parish society the head, center and foundation of everything. The medical meetings should be for the benefit of its members. At the afternoon meeting all subjects that concern the public health are fully discussed and illustrated in heart to heart talks, the relations to the people of the individual physician are discussed. The causes for the popular distrust of physicians, the defective and imperfect medical laws, the disastrous consequences of domestic pestilence increasing the sick and death rate are made impressive by illustrations drawn from personal and official experience. What the profession stands for, its high, unselfish aims and purposes, what it has accomplished under great difficulties and what it could accomplish if it could have the confidence and support of the people (to which it is entitled) are brought out. In a word, Dr. McCormack takes the public into his confidence and shows its deep concern in every interest of the profession. He shows up fraud and quackery in their true light and the "patent evil" is painted as it deserves. At the conclusion of his talks there is always free discussion by laymen, representing the leaders of public opinion, who are in sympathy and ready to pledge cordial assistance in the great reform work proposed. This work opens up an entirely new field of appreciation, honor and usefulness to the profession and to the public in every community. Above all, it brings the profession and the public together to the great benefit of both.

Let us appeal to the great daily newspapers and magazines advocating municipal righteousness, clean politics and broad unselfish citizenship, to not only refuse space in the advertising pages but to turn loose the editorial guns on those fakes and robbers of the sick. Possessing as they do, the confidence of a large constituency, they could help mold the right sentiment, the greatest power on earth. Let us not expect too much from legal measures. There

never has been and never can be enacted any law which will protect people from the consequences of their own folly. So long as man is constituted as he is, the charlatan will thrive and do business. Of course in matters so effecting the public health and the welfare of society, it seems that we should have immediate and necessary laws, but to give life and strength to these laws it is absolutely necessary to focus public attention on the questions demanding correction, as it is the only way the public can be brought to the realization of the facts. When this is done, when the inertia of public opinion is set in motion by an adequate understanding of the facts, this evil like many others will find an easy solution.

Educate the people, create the public sentiment and it will soon crystalize into measures and laws to check and limit charlatanism.

Orleans Parish Medical Society Proceedings.

President, DR. JOHN J. ARCHINARD. *Secretary*, DR. AMEDEV GRANGER.
141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. AMEDEV GRANGER, Chairman.
DR. HOMER J. DUPUY and DR. E. O. TRAHAN.

MEETING OF JULY 27, 1907.

DR. JACOBY read a paper entitled

Report of a Case of Double Hydrocele, with Operation and Illustrations.

My reason for reporting this case is not due to the fact that hydrocele is unusual, nor that the operation performed had any new feature, but merely because double hydrocele is quite rare and this one especially was unusually large and equal in size on both sides though one side had begun about twelve years before the other.

The illustration of the patient before operation shows the con-

dition plainly and the uncomfortableness of the patient under those circumstances, for he was unable to work and barely able to walk, so that he was compelled to seek immediate relief.

He was a patient of Dr. C. L. Chamberlain, who had referred him to me.

Patient's personal and family history is good. He states that he had gonorrhea about thirty years ago, complicated by orchitis, which remained several years. About 13 years ago he noticed that the scrotum of the left side began to swell gradually and he suffered some pain in the left groin. However, it did not cause enough discomfort to make him see a physician. About 18 months ago, he said that he had been walking very fast and quite a long distance, when he felt a peculiar sensation about the medium line of the scrotum. Upon examining it he found the right side of the scrotum distended with fluid; the pain of the left groin seemed to be relieved thereby. Patient had never worn a suspensory or used any support, though he continued to follow the occupation of a painter up to a few months ago.

Under spinal analgesia, the sac was incised on the left side first, but on handling the testicle, the patient created so much trouble that it was necessary to resort to ether anesthesia before any further procedures could be carried out. The tunica was quite adherent to the scrotum and had to be dissected out, after which I everted it and sutured it behind the testicle, to avoid inversion. The same procedure was carried out on the right side, except that I incised part of the sac and then everted it. A small gauze drain was placed at the lower end of each incision. There was no connection between the sac and both testicles were normal. Judging from the picture, one would consider that there was a double sac on each side, but such was not the case. About five pints of fluid were obtained from each hydrocele. It was my intention to cut off some of the scrotum but the failure of the spinal anesthesia and the necessity of giving ether, combined with the fact that the patient did not take the anesthetic well, made me decide not to do any more. Indeed, I felt at one time during the operation like incising the sac and draining it. The patient made a good recovery,

as one can judge from the picture. I have seen him since the operation and he is in good health and well able to work without any discomfort. He visited me at the hospital only a few days ago and I found the scrotum had shrunk very much since he had been discharged, so that he had decided not to have a piece of the scrotum removed, which he had promised he would have done as soon as he had recuperated from the previous operation.

DR. THIBERGE read a paper entitled

Criminal Abortion.

Six months ago, hearing our distinguished Annual Orator, I was much impressed with these words: "Give the public facts, organization, leadership." Though applied at the time to food adulterations, I feel that they can be applied with greater reason to this subject. "A Christian instinct," he exclaimed, "leads me to whom the physical well-being of Society is dear, to appeal to you in your great power and consecration; and this instinct is strengthened by the conviction that you, best of all, as a body, can do the work required."

I selected the subject, not because I imagined that I could offer a solution, it is not an easy matter to handle successfully, but rather like a soldier engaged in unequal combat, to call upon you for assistance and advice.

Whenever a member of a united, strong and intellectual organization like ours recognizes an abuse existing in the community, a moral cancer ever-increasing, threatening the very life of society, it is his duty to direct the minds of men better qualified than his towards its extirpation; so that, in submitting my views on this subject, I consider that I am simply discharging a duty long neglected. From time to time this subject has been opened, and I think with gratifying results, but the fact that, so far, the reputable profession has failed in eradicating criminal abortion, whose existence in our midst, and even to a greater degree among the so-called highly civilized society, no one can deny, whose body trail can be traced throughout our great country, should in no way dis-

courage us, for the need of its suppression is felt more keenly every day.

It is only by repeated storming and continual skirmishes, by unerring perseverance and, above all, by presenting in the combat a strong, well-united and untainted front, that we can ever accomplish anything.

By criminal abortion, I mean criminal interference with the course of gestation, so as to cause the premature expulsion of the ovum, embryo or fetus. England, France, Germany and Austria pronounce the mother in such instances guilty of felony and the accessory is given three years of penal servitude, while in this country, if I interpret the appended law correctly, the penalty is from one to ten years. Indiana has a law for even those applying for abortion, and for those selling or offering for sale abortifacients. We have the law, we have the crime: why not exact the penalty? "The harmless, helpless, innocent fetus, who has recognized legal and moral rights, whose very existence dates from the union of the male and female elements, ruthlessly assaulted and *murdered* in innocent blood." Why is the law not enforced and the community not disburdened of its disgraceful criminal, be it the cringing midwife, whose hands, coated with germs, are stretched to throttle life for fifty cents, or the so-called respected practitioner extorting from his victim \$500? An accusation of this character is so grave and carries with it such a degree of condemnation, that we should never make it recklessly, however positive we ourselves are of the guilt of the party we wish to bring to justice. We must have positive proof. How are we to get it? How are we to proceed? in a personal conference with our District Attorney, I ascertained that we have in him an official who would cheerfully assume responsibility. All that is required of us, is, to furnish him with the fact that an abortion has been performed, the name of the woman and the proof of a recent abortion. An investigation is then immediately held and we thus assume no responsibility, nor do we render ourselves liable to any damage suit, because the only connection we have with the case is that of a witness to testify to the positive signs of a recent criminal abortion, the district attorney finding the guilty party and

making the charges himself. In cases where the sacredness of privileged communication be the only protection remaining between the criminal and his just punishment, I do not think, though the courts of justice would respect it, that we are morally bound to keep the secret, but rather that duty demands us to furnish the knowledge thus obtained. Our lips are unsealed by a higher moral law, crying for the punishment of the murderer.

So shrewd are the abortionists and so well do they protect themselves that it is only in extremely rare cases that their boldness blinds them and gives us an opportunity to fasten the guilt on them.

The practitioner who with all the data in his possession necessary to accuse and convict the criminal, lacks the moral courage to do his duty, no longer deserves our respect and renders himself as guilty as the abortionist himself, if not more so.

While waiting for this opportunity, we should not remain inactive, but agitate this question frequently in this hall and spend our efforts more to prevent the crime than to seek its punishment.

If the law is powerless to stem this crimson tide; if, in spite of all watchfulness, the abortionist finds a way to flood the market with his lethal menstruums, and to poison the press with advertisements, what can we do to check this abuse? I say *appeal to the woman herself*. It was surprising to me while looking through the literature to hear the voices of the ablest writers from the four corners of our country blend in unison in giving this advice: "Appeal to the woman herself, to her love of truth and innocence, raise her moral sense, educate her on the physical as well as the moral ills consequent to this practice." When appealed to by a client, married or unmarried to relieve her of a fetus, so that she may escape the care, burden or responsibility of a large family, or on account of the demands of fashionable society, or on account of her fondness for pleasure, it is our duty to respond, not with harshness or indignation, because many mothers, until so instructed, do not consider the destruction of the product of gestation in the early months morally wrong, but look upon the embryo as a cell or combination of cells, having no individuality and no soul, only as a

part of her organism, which has no right, legal or moral, prior to hers; but we should respond by ascertaining the reason prompting such a request, and gently, kindly and patiently convince her of the sophistry of such reasons and otherwise give advice, measured according to her individual temperament, with as great tact and care as we would bestow on the portioning out of powerful medicaments. Endowed as each of us professional men is with special gifts best suited to the discharge of our honest work, we should not neglect them in this instance. Our opinion carries weight and our advice, if given with tact, sincerity and, supported by appropriate arguments, is very likely to be heeded.

Women who are afraid of losing their beauty from frequent pregnancies, who dread the hour and danger of labor at term, who shrink from the short ordeal of delivery, in short, try to avoid the pain consequent to a *natural* process like labor, can be apprised of the many physical evils that are sure to follow if the course of *nature* is tampered with. Subinvolution, greatest danger of septicemia, cellulitis, pelvic peritonitis, endometritis, malpositions, neuralgia, and even *insanity*, have been traced to premeditated abortions, so that we may well exclaim in the words of Dr. Ghent:

"If a woman would retain, to the greatest degree possible, all her personal charms and attractions; if she would attain to the highest, noblest and grandest development, physically, morally and intellectually; if she would still love and be loved with that pure and undefiled affection that springs from the bosom of the Eternal, let her obey the mandates of all natural law and her own heaven-born, womanly instincts. She may go on sinning and allowing herself sinned against for a longer or a shorter time and elude the grasp of disease and death for a violation of physiological laws, but, sooner or later, the forfeit will be claimed."

The fetus, not being an unjust aggressor, being in possession of life from its very conception, cannot be destroyed without *murder* being committed. It seems to me that if the question was put in this light to the mother, her sense of justice, honor and love for her own flesh and blood, would rise and deter her.

Each of us can, in a quiet way, plead strongly the cause of the

unborn child and do a great deal to stem the course of race suicide. Each of us has had an opportunity and each of us today, I am sure, can recall in his practice the sweet face of these bright children, now grown up to bring consolation and joy to the mother, who would have forsaken them in a misguided moment.

Now, a last suggestion: When called to attend a poor victim suffering from the result of criminal abortion, we should unhesitatingly take the case and do all we can to assist her, so that the patient, feeling that she has our sympathy, will give us her confidence and thus enable us to ascertain the cause leading to such an act. By a little tactful argument and advice in such instances, I think we can thus prevent a subsequent attempt.

LAW GOVERNING ABORTIONS: Constitution and Revised Laws of Louisiana, page 330, paragraph 807: "Whoever shall feloniously administer or cause to be administered any drug, potion, or any other thing to any woman for the purpose of procuring a premature delivery, and who shall administer or cause to be administered to any woman pregnant with child, any drug, potion or any other thing for the purpose of procuring abortion, or a premature delivery, or whoever, by any means whatsoever, shall feloniously procure abortion or premature delivery, shall be imprisoned at hard labor for not less than one nor more than ten years." (As amended by Act 24, 1888, page 18.)

DISCUSSION.

DR. LE BEUF: Some years ago I tried to reach one of these abortionists. Mr. Luzenburg was city attorney at the time. He showed me the law and we went over the whole thing together. There was absolutely no record of anyone having been made to suffer for having committed a criminal abortion. While practicing 12 years in Algiers I saw a case in which a catheter had been shoved through the head of an unborn child. The woman confessed to the deed and I spoke to Dr. Miles regarding the case. He advised me not to go into the case. I believe we should appoint a committee to confer with the legal authorities though there can be little done unless the patient is also willing to testify. When I read the paper on the same subject years ago I said I would give

attention in the first case but if I was called to the woman again for another abortion I would refuse the case absolutely. In another case I found a French Nélaton had been stuck in the womb; the evidence was there. Now the other day this happened again. I said I would not see this case if the woman died. The woman went to one of these midwives who, I believe, lives on Mandeville near Elysian Fields St. This woman had to be taken to Touro Infirmary where her uterus was removed. I did all I could to advise her against having a criminal abortion but she insisted and had it brought on by a midwife.

I believe Dr. Thiberge is right. The only thing to do is to educate the people. We should try to impress them with the idea that it is a crime.

DR. NELKEN said that Dr. Thiberge deserved praise for raising before the society the subject of criminal abortion. It was about time that something be done to bring before the public so grave a peril to public welfare and morality. The public are apathetic or ignorant as to the meaning and dangers of abortions. They should be taught that it is as much murder to kill the helpless babe in its mother's womb as it is to strangle a little kidnaped child. Indeed the former crime is the more cowardly for in that case the helpless victim can not even make an outcry, and public indifference makes the murderer safe; no mobs form to avenge the law. He is received among his fellow men at least with indifference, and he does not hesitate to keep his office in our most central buildings and to advertise his calling in the prostituted columns of the daily papers.

The daily papers of this city have been carrying the advertisements of Dr. * * * a notorious abortionist, for years, an advertisement which pays about 10 cents an insertion. If every man has his price, the honor of a newspaper can be bought pretty cheaply.

There are men and women in the city of New Orleans whose list of murders would make the confessions of Harry Orchard pale into insignificance.

The minister preaches to his fashionable congregations of Herod

and his crimes. Why their congregations kill more babies in a week than Herod could have destroyed in a life time.

Isn't it about time that something should be done to stop this carnival of child murder?

Let us teach that the fetus in the mother's womb is just as much a living entity as the talking, breathing child. Let us demand and lend our aid to rigid enforcement of the law.

Dr. Nelken tells the story of a practitioner who had advised a mother, begging for an abortion on the plea that her family was too large, that she go home and cut the throat of her oldest child and her family would then number the same.

DR. DABNEY: I fully agree with the gentlemen on this question as it seems almost impossible to get anything out of a Grand Jury. I tried many years ago to get one of these professional abortionists indicted. I was told that unless I could get witnesses to the fact that I would lay myself liable. I talked to one young woman who came to me and said "Well if you won't do it I'll never speak to you again." She happened to be a devoted Christian. I said, "You go to the priest and if he approves of it and will assist me I will do it." She said that he would tell her that would be murder. I tried on one occasion in Kansas City to get an indictment but failed. I made attempts several times but utterly failed. I had an Irish woman, a devout Christian, come to me 10 or 12 years ago. She said she was feeling badly but gave no positive symptoms so I decided to make an examination, and found evidence of criminal abortion. I asked her if she did not know she had committed murder—murder of her own helpless child? She said it was no harm to kill a child before it was born and such is the widespread belief of the "plain people." We need no more laws; we need strict enforcement of existing laws; but above all we need to develop the conscience of our patients—married or single. The better class do not seem to care whether it be murder or not so long as they are relieved of their burden.

DR. THIBERGE, in closing: I feel well paid for my efforts in writing this paper, by hearing you all speak, and I feel that we can do something if we only remain united. I neglected to men-

tion the new method of checking uncontrollable vomiting of pregnancy, which condition, in the opinion of some, demands induction of abortion. Lyon, of Paris, narrates a series of cases cured by simply detaching the membranes from the neck of the uterus, under general anesthesia. He assures us that such proceeding stops the vomiting and is not necessarily followed by the expulsion of the fetus. I want to emphasize that the District Attorney says the only thing we have to do is to furnish him with the proof of a recent abortion; he will get the woman to testify.

We do not lay ourselves liable. We simply prove that it has been done. The idea of Dr. LeBeuf to appoint a committee to confer with the District Attorney, is a feasible one and I think it ought to be done. I do not think we should direct our attacks against the small offenders, but we should get after the most important ones and the whole edifice would topple down.

I was speaking to Dr. Hummel and he says that we cannot appeal to the maternal instinct, as it does not come into play until the child is born; but I think that by proper arguments we can arouse it.

I again thank you for your discussion.

MEETING OF AUGUST 10, 1907.

DR. R. C. LYNCH read a paper entitled

Some Notes from my Visit to Foreign Clinics.

When, last August, I decided upon making a trip to visit the foreign clinics I experienced some difficulty in obtaining such definite information as would permit me to arrange a plan by which I could secure the greatest amount of work in the time at my disposal. I thought therefore that my experience abroad might be of interest to others who may be contemplating a similar trip—and perhaps to others who have no such intention. I will attempt to give a general idea of the advantages to be gained by a trip abroad, and the methods of teaching employed by the men in the various clinics visited.

As the purpose of my trip was to further my studies in the spe-

cial line of Ear, Nose and Throat work my experience was confined to these branches and my remarks will apply only to these special clinics.

London was the city first visited and since the plan of teaching is practically the same in all of its clinics, a description of one will suffice.

The Golden Square Nose and Throat Hospital holds its clinics from 12 to 6 p. m. and has an average of 250 cases daily.

The clinic is under the supervision of its visiting staff four in number who attend on alternate days.

Each staff physician has two assistants who treat the old patients.

During the examination of new patients the physician in charge discusses very briefly the conditions found present.

A new student is requested to look on for three months after which upon application he is assigned as sub-assistant to one or two members of the staff. His privileges are to examine new patients, make notes of the symptoms and make a provisional diagnosis which he must defend before the class.

After serving a term upwards of six months of this work he is eligible to apply for assistant. When this is secured he will have ample opportunity for all varieties of minor work and an occasional major operation. So, to the student who has not more than a year to spend, London will not appear very attractive. I visited the London City General Hospital, Guy's Hospital, The Royal Ear Hospital and the Central London Nose and Throat Hospital, in all of which the practice was about as I have outlined.

From October to May lectures by the staff are given four nights in the week.

A visitor should not miss that wonderful collection of anatomical and pathological specimens preserved at the Museum of the Royal College of Physicians and Surgeons. Three immense floors are covered with everything imaginable. I especially enjoyed the series of Taynbee's dissections of the Middle and Internal Ear and his collection of pathological specimens.

I was in Paris only four days—hardly long enough to learn

anything of their methods but was fortunate in seeing one of Prof. Doyen's assistants perform a Fronto-Ethmoido-Sphenoidal operation.

After my experience in London I was somewhat discouraged, for, not being able to speak German fluently I anticipated a rather hard time upon my arrival in Vienna but I followed the advice given me here and went straight to the Café clinic.

You will imagine my surprise when I found a room full of Americans, speaking English and all glad to welcome the newcomer and extend to him the helping hand so earnestly sought for by a stranger in a strange land. After a short while I learned that this was one of a few such places where the Americans gather for social enjoyment as well as mutual benefit. These meeting places or Cafés are but subdivisions of the Am. Med. Asso. of Vienna.

At a Thanksgiving banquet given by the Americans in Vienna, in 1903, Dr. Ravold, of St. Louis, in response to a toast proposed, dwelt at length on the need of an American medical society in Vienna. Immediately the association was organized, officers elected and the purposes set forth as follows:

"To promote social intercourse of its members; to furnish information for the rapid orientation of new members in regard to pensions, rooms and restaurants, and to provide information in regard to the scope and relative value of courses; and promote the scientific advancement of its members."

The association meets twice a month at one of the large cafés or hotels, and is addressed by some prominent physician or one of the University professors. Two or three men interested in the various branches of study are appointed by the association to meet newcomers and see that they are furnished with sufficient information to secure whatever work they wish to pursue. So it was that at the café clinic I met Dr. Collier, who not only introduced me to the men present, but led me through that maze of a hospital, explained the manner of securing work and posted me on what was good and what was not.

Every Monday evening all the men doing special work meet at the Café, discuss the courses going on at the time and arrange for

new work. At one of these meetings it was decided to ask the assistants to address the meeting on a subject pertaining to the branch, and I had the pleasure of hearing Dr. Alexander deliver a masterly lecture on brain abscess, the first of the series; and before I left Vienna eighty other such lectures had been arranged.

This will give you some idea of the enthusiasm of the German teacher, his ever willingness to help the student and stimulate him to further and deeper study.

The General Hospital in Vienna is an enormous place, covering 52 acres, having a capacity of five thousand bed patients, and treating annually upwards of six hundred thousand patients in its clinics.

A day spent in Prof. Politzer's clinic will give an idea of the conduct of the clinics and the methods of teaching. Prof. Politzer has five assistants, all of whom have served the three years of apprenticeship. To these men are allotted the care of the clinic patients, the ward patients, the tabulation of records and the preservation of pathological specimens. The clinic averaged about 400 patients daily and fourteen students who have spent some time in Vienna are appointed by Dr. Alexander to care for them. All new cases are examined by an assistant and referred for treatment. It was in this capacity as one of the fourteen that I gained considerable experience.

Should one hold this position for four months he is then given, as a reward, a mastoid operation to be performed before the class, and assisted by Dr. Alexander.

From this enormous mass of material the Professor selects his cases for his lectures. The patients are seated at a long table with light handy, and his students follow as he examines and draws a picture of each condition found present. Each student has ample opportunity to examine each case, thus giving him unexcelled clinical work.

From the cases present the Professor selects a type and gives a complete lecture, going over the etiology, pathology, symptomology, diagnosis, prognosis and treatment. It was in his lecture on sclerotic otitis, the bane of the aurist's existence, that he maintained

that the condition was not purely an ear disease but a local manifestation of constitutional disorder. He exhibited seven beautiful microscopical sections to illustrate, and in fact illustrated all of his lectures from his store of pathological and microscopical specimens, thus indelibly fixing the condition in the student's memory. The operation work he has lately turned over to his assistants, and I saw as many as six mastoid operations in one day. These men are very rapid operators, who seem perfectly sure of their ground and have no hesitation in exploring the brain and sinus upon the least suspicion of disease.

I saw Dr. Newman do four mastoids under cocain. After anesthetizing the incision line, four points are selected for subperiosteal injections of 2% sol. of cocain, viz.: at the beginning of the incision superior to the canal; at the mastoid tip; over the site of the sinus, and along the posterior canal wall.

Before beginning the anesthesia a small dose of morphin is given and after the last injection a lunch of a ham sandwich and a cup of tea, and a wait of fifteen minutes. The operations were absolutely painless, and it caused a feeling of awe to see a man whose brain and sinus had both been exposed, after being bandaged to get up and walk to his bed with perfect comfort. All of these cases recovered nicely. I believe this to be quite a step in mastoid surgery and certainly deserves careful consideration.

The professor allows his assistants to conduct private courses, and in fact they make their living this way.

It is no wonder then that the Germans are enthusiastic teachers and tireless workers. Money is to them certainly a very secondary consideration, Alexander, for instance, only realizing about \$3,000 per year, while in this country a man of his attainments should realize ten to fifteen thousand. It seems to be the height of their ambition to become great teachers like the master, Politzer, and for this alone they strive. This applies to the hospital men, for I met none of the private or family physicians.

A visit to the nose and throat department under the supervision of Prof. Otto Chiari would disclose similar arrangements except that the patients are treated by the student under the direct supervision of the assistants.

Operative courses on the living patient may be had in Vienna, the classes being limited to two members, and the student must do all of the work himself. It was in such a course I had the opportunity of passing the Bronchoscope and Esophagoscope. It is especially noticeable in all the work in Vienna that the *student* is the worker and the instructor the onlooker—a reversal of the usual practice in this country. The operative work done by Prof. Chiari is of a very high order, still I believe as a general statement the technique of American operators is equal to if not better than that of the German. Certainly our equipment and operating rooms are far more convenient and asepsis more thoroughly and consistently carried out in America than in any place I saw abroad.

DR. C. W. ALLEN read a paper entitled

A Case of Typhoid Fever, with an Unexplained Symptom.

In reporting this case of typhoid fever of rather uncommon course, I wish to especially emphasize an unusual and persistent symptom, and to recall a case previously reported to this Society, Sept. 26, 1906, which exhibited this symptom and which resulted abruptly in a fatal termination.

To conform to chronological order, I will summarize the previously reported case and then report the second, the subject of this report.

Mrs. T., aet. 56, first seen September 12, for several days had had a feeling of malaise, loose bowels, anorexia; temp. 100° F.; next day condition practically same. At 7 p. m. was hurriedly summoned and found patient suffering great pain in both knees; examination showed no inflammation and movements did not increase pain. Thorough examination failed to reveal cause of trouble; temp. 100°, pulse 104; facies those of great pain. I prescribed several powders, each containing caffein, gr. 1/6; codein, gr. 1/4; aspirin, grs. X; repeat in one-half hour, but not to give more than two before I returned.

9 p. m., one hour after last powder, pain about the same; temp. 99 4/5. Hypodermic of strychnin, gr. 1/30; morphin, gr. 1/4;

and atropia, gr 1/150; after three-quarters of an hour, as there was no effect, patient demanded relief. I gave an additional hypodermic of morphin, gr. 1/8, atropin, gr. 1/150.

The pain began to abate, leaving by remissions, and she was entirely easy in 20 minutes. Later on took a glass of milk and went to sleep, lying on her right side, curled up with hands under her face.

She was watched through the night, spoke to her daughter when aroused, said she felt comfortable. She was last observed about 6:00 a. m., seemed to be sleeping, her breathing seemed regular. Shortly after 7 her daughter tried to arouse her but could not. I arrived at 8. She was dead, still warm, was lying exactly as I had left her the night before.

Dec. 31, 1906, I was called to see Mrs. C., young married woman; pregnant; she had been suffering for several days with frequent urinations and occasional strangury, much worse the day of my visit, to which had been added pains over the lower abdomen. Temperature 99 F., bowels constipated. The day following urinalysis showed slightly acid urine, very cloudy, containing a little pus and teeming with bacteria. Under vesicle sedatives and antiseptics the condition improved. The pregnant uterus threatened trouble but yielded to appropriate medication.

During the succeeding three days her symptoms gave very little trouble, the temperature ranging between 99 and 101½ F., when a diagnosis of typhoid fever was made and she was sent to the Touro Infirmary, January 3. From this time her bladder gave her very little trouble. Her temperature on admission was 102°, and the day following 101 2/5°, from then on the temperature ranged from 96 2/5° to normal, passing the normal mark only on the 13th, 15th, 16th, 17th, 18th days of her admission, on which occasions it reached 99° F. for a short interval; a rather unusual temperature chart. The diagnosis of typhoid was confirmed by the Widal test in the Touro laboratory. Her bowels were slightly constipated throughout the entire course. The case was otherwise uneventful until the 5th day of her admission, when she was awakened from her sleep by pains in the knees so severe as to make her cry.

Careful examinations showed nothing wrong with the knees; movements did not affect the pains. The pains passed after several hours, in which some sedative was used and the parts rubbed. The pain recurred similarly next day and again the day following, when several ounces of blood was noticed in her stool. The pain and bloody stool recurred daily for eight days except on one or two days when the bowels did not move, no blood being recorded, but the pain being the same. After the blood ceased to appear the pain continued for two days longer, when it ceased.

The hemorrhages had never been alarming, varying from $\frac{1}{2}$ to 2 ounces, occurring about once a day.

The pain in her knees lasted 12 days in all; it was rarely ever constant throughout the 24 hours, but would give her some moments of relief. She described the pain as being of an aching character, and sometimes was severe enough to require a hypodermic.

The uterus gave some little trouble, a few pains on one or two occasions, but did not amount to much.

This case is peculiar in two features, the unusual temperature curve and the pains; I have frequently noticed the low range of temperature or its short course in cases having hemorrhages, but have never encountered the pain in the knees except in these two cases. The cause of the pain in the first case must remain a mystery, but in the second case it is more easily explained; no doubt being referred to the knee, through the obturator nerve, and reaching the nerve through the sympathetic.

I am at a loss to explain the exact significance of the pain or its cause, but wish to put these cases on record, as they may be useful to others.

The chart and record of the last case were kindly prepared for me by Miss Hindman, the Touro nurse who had charge of the case.

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

Public Baths for New Orleans.

Every now and then a passing public interest is developed upon the question of public baths for New Orleans. During the last ten years the matter has been agitated in the public press two or three times.

At one time along the river front one or two establishments existed where the opportunity was given the lower classes to avail themselves of river bathing under conditions of safety. The neglect and abuse of these, however, gradually resulted in their abandonment and today New Orleans is without any public service in this regard.

The question of public baths is one which has attracted the attention of the medical profession in almost every large city and in a few of these in the United States some pretense of a satisfactory arrangement has been arrived at.

Municipal interest in the question of institutions of this sort has always been meager and even in great cities in this country the public bath has assumed proportions through the philanthropy of some citizen recognizing proletarian needs. It is interesting to contrast some of the older cities of Europe, especially of Germany, where, even with a small population, such communities provide public baths which are both adequate and commodious. It is not always a question of expense, for when the bath is made attractive enough and practical enough it can be made almost self-supporting and, under private ownership, can be made to pay a profit on the investment.

Discussing the public bath as a whole it should be impressed upon the citizen generally that a public bath to fulfil its usefulness

should be planned and erected under perfect sanitary arrangements; it should have facilities for all classes who may frequent it and the building itself should be located so as to attract the patronage for which it is erected.

A public bath could be so arranged as to provide not only a free shower and tub baths but also full convenience for the Turkish and Russian baths for all who desired or needed them. A minimum fee could be charged for the commodities of the bath and these could be set against the item of expense.

New Orleans is now large enough to entertain the consideration of a public bath and if the city itself does not feel justified in making so desirable a public improvement, this should appeal to the philanthropists of the community seeking outlet for their superfluous wealth. It seems a travesty on the intelligence of this community that with a great waterway passing our very doors no provision has been made for the distribution of this to a purpose such as we have considered. Even the provincial cities of the Roman Empire held that the bath was a necessity to citizenship and the ruins of antechristian cities bear evidence to the importance of the bath in the household arrangement. There is no reason why we should not emulate such motives and provide for our future generations of citizens in the establishment of an institution for the sake of cleanliness as well as hygiene.

Illegal Sale of Narcotics.

The periodical wave of municipal interest has again reached New Orleans in the matter of the sale of narcotics and like drugs to the public without the proper medium of a physician's prescription. Every now and then the evidence of the evil effect of cocaine, morphin, and the like grow so patent that the police courts and institutions for the insane ask for aid in the prevention of victims of the drug habit. Ordinances have been passed but they evidently failed of execution as the habit continues and the arrests for violation of the law have been notably insignificant.

The effect of former legislation in the matter has resulted in the more clandestine sale of drugs of this sort but the evil, so far

as the victims are concerned, has not been abated. Cocain particularly has a large vogue among the negro population who employ this poison in vile alcoholic concoctions and in snuffs, or the more educated indulge in the evil by the ingestion of the pure drug undisguised.

When an investigation of the sale of cocain was undertaken a few years ago it was discovered that a great many drug stores would sell cocain under various names so as to avoid the letter of the law. Of course, we believe that the better class of dispensing druggists recognize the criminality in selling cocain without a physician's order, but there are many drug stores which are willing to thrive on an ignorant public and to assume ignorance on their part as to the undoubted results from such sales.

The new movement is supported by the Board of Health and we feel that the earnestness evinced in their intention to accomplish some result must this time effect an issue in the matter.

If the police courts would make a record of all cases of arrests of persons evidently suffering from the effects of cocain and secure the names of shops from which the supply had been had, the officials of the Board of Health may succeed in making examples enough to bring about a reform.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In Charge of DR. F. A. LARUE, Assisted by DR. P. L. THIBAUT, New Orleans

ARTERIAL GRAFT.—Mr. Delbet (*Revue de Chirurgie*, June, 1907) mentioned to the Société de Chirurgie that he had made an unsuccessful attempt at arterial grafting on an old man who had a thin aneurismal tumor above the internal condyle of the right femur.

The patient's entire arterial system was in advanced calcareous condition. Rupture of the aneurism was imminent.

Delbet, before resorting at once to amputation, preferred trying arterial grafting. He utilized a *human femoral* which had been dissected from a freshly amputated limb.

The severed ends of the femoral, after extirpation of the aneurism, were each caught up by three equidistant sutures, which served to unite them to the interposed femoral graft.

It was impossible to reinforce by additional sutures, the patient's artery tearing with each suture.

Delbet desisted and ligated both ends, followed in a few days by gangrene, necessitating amputation at the lower third of thigh.

The case shows that, when the arteries are much damaged, arterial surgery is a failure; such are the cases where good results would be welcomed.

Tuffier cited a personal case of arterio-venous anastomosis, performed last February on a man at 56 yrs. for senile gangrene of the foot.

A temporary ligature was placed on the artery and vein at the apex of Scarpa's triangle. He then united posteriorly the two vessels with very fine and non-perforating sutures. Parallel incisions were made about $\frac{3}{8}$ of an inch in length, in both vessels; the cut edges of the artery and vein were anastomosed with through and through sutures, reinforced anteriorly by non-perforating sutures. Hemostasis was perfect. The vein was then ligated above the point of anastomosis; closure with drainage.

The wound healed kindly but the patient succumbed a week after intervention. At autopsy the artery was found permeable but the vein was obliterated by a brownish clot adherent to the anastomotic orifice.

Delbet recalls that all arterio-venous anastomoses, undertaken against gangrene, have failed.

Martiny-Satruestegni and Jaboulay made lateral connections and Tuffier ligated the vein above the junction.

Carrel has experimentally made end to end anastomoses and clearly demonstrated that the blood then circulates in the venous trunk to the periphery. It does not follow however that gangrene can thus be thwarted as it must be proven, which has not yet been done and appears unlikely, that the blood courses through the capillaries *inversely*.

Tuffier stated that in his experiment it seemed to him that the blood returning from the peripheral arterial end was venous.

It is highly probable that the blood had traversed the capillaries.

Ricard said nothing is proven as any severed artery bleeds from its distal end. On the other hand the blood passing directly from the artery into the vein must return into the venous circulation by the anastomoses.

Delbet thinks likewise. To prove that the blood goes through the capillaries in a retrograde course, it should be examined as it comes from the distal arterial end to see whether it presents the character of venous blood. This has not yet been done.

Department of Internal Medicine.

In Charge of DR. E. M. DUPAQUIER, New Orleans.

OPHTHALMO-DIAGNOSIS.—A diagnosis based on a reaction of the conjunctiva. The test is now applied for the diagnosis of tuberculosis and typhoid fever.

History—Von Pirquet, quite recently, discovered that a small amount of tuberculin deposited in a very light scarification on the skin of a tuberculous person, produced a peculiar reaction. There appeared, within 48 hours, redness, edema, frequently a papule, like spurious vaccine and a week later dessication and disappearance of all inflammation. In healthy persons, such a reaction was exceptional. This *cuti-reaction* proved to be true also in bovines.

Wolff then made the test on the ocular mucosa of bovines. This the *ophthalmo-reaction* was, also, true in bovines. Calmette then tried this ophthalmo-reaction in children and adults.

Procedure.—Dry tuberculin (precipitated by alcohol 95°) is used to make a one per cent solution in distilled and sterilized water. It must be freshly made.

One drop is instilled in only one eye of each subject.

Reaction.—Within five hours, all tuberculous subjects show a marked congestion of a bright red color with more or less intense edema. The caruncula swells, reddens and becomes covered with a light fibrinous exudate. This vascular reaction increases and tears begin to run. Six hours after the instillation, the fibrinous secretion becomes more marked. It gathers in filaments in the inferior conjunctival cul-de-sac.

The height of the reaction occurs from six to ten hours after the instillation. There is no pain. The patient experiences but a slight annoying sensation, a little smarting and vision is affected only by the presence of the exudate. No chemosis occurs. The rectal temperature is unaffected. Comparison with the eye in which no tuberculin was instilled indicates the degree of reaction.

In children after eighteen hours, in adults after from twenty-four to thirty-six hours, the congestion begins to decrease and usually vanishes. In healthy persons or in those suffering from non-tubercular disease, the tuberculin instillation is followed by a very slight redness with no fibrinous secretion and no discharge of tears. After from two to three hours the slight redness had disappeared. Regarding the ophthalmo-diagnosis of typhoid fever Chantemesse is the originator.

Procedure.—A powder is precipitated by absolute alcohol from a strong solution of soluble typhoid toxin. The fiftieth part of one milligramme of the powder is dissolved in one drop of water and this is instilled under the conjunctiva of the inferior palpebra.

The test proved true. The difference shown between the reaction of the tested eye in those who had or had had typhoid fever and in those who had it not or had never had it, is so obvious that little doubt can be entertained that a practical and early test for typhoid is now assured and at hand.

Comments on the usefulness of this ophthalmo-diagnosis in both tuberculosis and typhoid are unnecessary. (*Journal de Medicine et de Chirurgie Pratiques*, July 10 and August 10, 1907.

Department of Therapeutics and Pharmacology.

In Charge of DR. J. A. STORCK and DR. J. T. HALSEY, New Orleans.

THE ADMINISTRATION OF CREOSOTE.—Creosote may be given in capsules, but, as has recently been pointed out by Dr. Bouchet (*Progrès Médical*, Sept. 1, 1906), the gelatin may dissolve in the stomach at a moment when the organ contains no food, or if the precaution has been taken to swallow the capsule only after eating,

at such a point as to let its contents out against the bare walls of the stomach. In that case an irritant action must be exerted, possibly a caustic effect.

Apparently M. Bouchet has devoted a good deal of thought and care to the problem of administering creosote in an inoffensive manner. His investigations have led him to the conclusion that an excellent way is to mix the creosote with powdered charcoal in the proportion of one part of the former to two of the later by weight.

Having been dried, the powder is done up in the form of wafers, each containing the proper dose of creosote. It might be preferable to put the powder into capsules as a mere matter of convenience. Several of them can be taken at a time if the dose is too bulky to be contained in a capsule small enough to be swallowed readily.

There is some loss of weight during the drying process, which lasts half an hour, no heat being used. One-sixth of the original weight is lost. Of course this loss is of creosote alone, though M. Bouchet suggests that the creosote simply parts with "humidity," and consequently becomes more concentrated. One might disregard the doubtful point, and adjust the doses to the patient's tolerance. Even the addition of charcoal does not render creosote wholly acceptable to the stomach, but it would doubtless do away with the irritation that might follow the administration of capsules filled with undiluted creosote. It is still better to incorporate the creosote with a generous amount of some bland substance, such as curd soap with powdered licorice or althea, and put the mixture at once into capsules.

J. A. S.

Department of Nervous and Mental Diseases.

In charge of Dr. P. E. Archinard and Dr. Roy M. Van Wart, New Orleans

LUMBAR PUNCTURE IN PSYCHIATRY—POMEROY (*Jour. of Nervous and Mental Diseases*) concludes as follows:

1. Patients should not be punctured unless they can be put to bed.

2. To be of definite value the puncture must be repeated two or three times, at an interval of at least ten days.

3. A constant negative finding is of more value than a positive one, for it rules out the presence of brain syphilis and parasyphilitic conditions.

4. In general paralysis the lymphocytosis is a constant and early sign and is usually associated with a heightened albumen content. The same can be said of tabes.

5. Lymphocytosis may occur in secondary and tertiary syphilis without clinical evidences of involvement of the nervous system, also it may occur in patients who give evidences from scars or other signs of old syphilitic infection. As a rule the cellular increase in such cases is far behind that observed in paresis and there is very slight albumen increase. Where inflammatory brain syphilis exists albumen increase may also appear.

6. In arteriosclerotic insanity a positive finding points to a syphilitic process, such as softened foci following specific arterial disease. In brain tumors, a negative finding is the rule. If a positive occurs, a syphilitic basis for the process can be taken for granted.

7. Epilepsy shows negative findings; if otherwise the suspicion of brain syphilis is justified.

8. Alcoholism in all its varieties gives negative results, if the finding is positive and there are no signs of nervous involvement an old syphilitic infection is to be taken for granted. Where symptoms of involvement of the nervous system are present general paralysis or brain syphilis is to be suspected. It is questionable in some cases even when symptoms of involvement of the nervous system are not present, in a positive finding with an albumen increase whether we are not dealing with an early paresis.

9. A differential diagnosis is to be made between brain abscess and meningitis by the presence in the latter of increased cellular material.

10. It cannot be enough emphasized that the lymphocytosis presents a singular disease sign, and only after consideration of all other clinical symptoms of the disease, should it be used to con-

strue the case. When the findings are considered with due care to the possibilities, the results obtained from lumbar puncture are an important, oftentimes an invaluable aid to the diagnosis of obscure nervous and mental diseases. It is of especial importance in differentiating alcoholism, general paralysis, dementia precox, epilepsy, brain tumor and finally brain syphilis. With the advancement of our knowledge of the occurrence of lymphocytosis in syphilis of tissues other than the nervous system, with further autopsy reports and improvement in technic, we can look forward to the solution of many, at present, doubtful phases of the subject.

Department of Ear, Nose and Throat.

In Charge of A. W. deRoaldes, M. D., and Gordon King, M. D.
New Orleans.

OZENA AS A SPECIFIC CONTAGIOUS DISEASE. In the June number of the *Annales des Maladies de l'Oreille et du Larynx*, Dr. Ferdinand Perez of Buenos Ayres contributes a most instructive essay on the etiology and contagious character of atrophic rhinitis. Perez claims to have isolated the specific germ of ozena and proven its causative relation to the disease by carrying out the requisite cycle of inoculation and reproduction. The microbe has a special affinity for the pituitary membrane even when injected into the blood of rats, rabbits, etc., and can always be found in the nasal discharge of ozenatous patients and often in the nasal secretions of dogs. Hence the disease, so the author claims, can be and is conveyed not only from an afflicted person to a well one, but also from dog to man. In support of his claims Perez records a series of 418 cases. Out of 180 of these cases 93 came from families in which one or more members were similarly affected; in 35 cases ozena was not present in the family, but the affected ones were in contact with some person who was affected and from whom the contagion could be traced; 16 are credited with having been infected through contact with dogs, and in 36 cases the origin of the disease could not be traced. The bacteriological and clinical evidence thus presented seem strongly to favor the claims of the author that the disease is not only a local affection of the nasal mucous membrane, but is due

to a special microbe, by inoculation with which the disease can be reproduced in animals and probably in man.

The theory advocated by Grunwald that ozena is merely symptomatic of accessory sinus disease is strongly attacked and that distinguished clinician urged to investigate the disease a little more thoroughly from another point of view than the one he has so persistently followed in recent years.

Perez does not announce the discovery of the specific cure for ozena but counsels that more care should be exercised in preventing the inoculation by those afflicted with the disease.

CONTAGION OF THE NASAL MUCOSA IN HAY FEVER. Prof. Gustave Killian, in the *Laryngoscope* of May, writes interestingly of his experience with cauterization of the nose in hyperesthesia of that organ, and points out the fact that much can be done toward the relief of this distressing affection by local treatment tending to reduce the sensitiveness of the mucosa. By probing the nasal cavity gently in such conditions two distinct areas of hyperesthetic mucous membrane can be located in each fossa; one on the septum just above the tubercle, and another on the lateral wall slightly above the anterior end of the middle turbinal. Killian applies trichloroacetic acid to these points and claims to obtain temporary amelioration of symptoms and sometimes cure.

The writer has had a similar experience and recommends a trial of this method in obstinate cases when the hay fever antitoxin and the removal of local lesions proves ineffectual.

Louisiana State Medical Society Notes.

In Charge of the Publication Committee,
Dr. P. L. Thibaut, Chairman; Drs. Homer Dupuy and Carroll W. Allen.

(Continued.)

DR. CALLAN then presented the report of the Committee on Medical Education, as follows:

Report of Committee on Medical Education.

New Orleans, May 14, 1907.

To the Officers and Members of the Louisiana State Medical Society:

Gentlemen: Your Committee on Medical Education begs to report as follows:

There are two medical colleges in this State, Flint Medical College (colored), a department of the New Orleans University (colored), and Tulane Medical College, a department of Tulane University of Louisiana, both domiciled in New Orleans. A third medical college is contemplated as a department of the Louisiana State University. This college is also to be domiciled in New Orleans.

Flint Medical College (colored) is now in the 18th year of its existence and is supported by the Freedmen's Aid Society and fees of \$50 per session from students. During the Session 1906-07, it matriculated 51 and graduated 9. Its course, as reported by its Dean, comprised 31 weeks, beginning October 1, 1906, and ended May 3, 1907. It has a corps of 16 teachers. Its average hours per week for past session has not been furnished us.

The Tulane Medical College is now in the 73rd year of its existence and is supported by an endowment of over \$1,000,000 and by fees from students, averaging \$146.25 per session. It has a corps of 58 teachers. The session of 1906-07 opened October 18, 1906, and closed May 8, 1907, a period of 29 weeks, with one week of holidays from Christmas to New Year. It matriculated 543 students and graduated 91. It averaged 32 $\frac{2}{3}$ hours per week.

Its work is tabulated as follows:

1st Year.	Didactic,	364 hrs.	Practical (clinical and laboratory)	422—806 hrs.
2nd	"	368	"	522—890 "
3rd	"	490	"	572--1062 "
4th	"	363	"	534—897 "

3655

As yet, no information of any special interest to the State Society has been published relating to the curriculum of the proposed new medical college. Suffice it to say that we have placed in the hands of a representative of the proposed Faculty of the new school a copy of all the data in our possession relating to the work in our hands.

An examination of a tabulation of results of examinations before State licensing boards for 1905, published in the Journal of the A. M. A in 1906, we find:

Flint Medical College, 12 graduates, 3 boards, $83\frac{1}{3}\%$ failures.

Tulane Medical College, 91 graduates (one registered on certificate), 15 boards, 11.1% failures.

On the dissection of these figures, we find the results of the examinations of graduates of 1905, examined in 1905, as follows:

Flint Medical College, 7 graduates, 3 boards, 71.4% failures.

Tulane Medical College, 70 graduates, 10 boards, 5.4% failures.

And, further, taking all graduates from 1900 to 1905, inclusive, examined in 1905, the results are as follows:

Flint Medical College, 12 graduates, 3 boards, $81\frac{1}{3}\%$ failures.

Tulane Medical College, 88 graduates (one registered on certificate), 13 boards, 10.2% failures.

Still further, taking graduates previous to 1900, examined in 1905:

Flint Medical College, 0 graduates, 0 boards, 0 failures.

Tulane Medical College, 3 graduates, 3 boards, $33\frac{1}{3}\%$ failures.

These figures, to our minds, do not present all that we would like to know and our Chairman has, unsuccessfully, endeavored to get the results on each branch or subject of these examinations. To make ourselves clearer, we will say that if graduates of any given school, even though passing successful examinations before licensing boards, should show that they are failing before various boards uniformly in certain subjects, we could then state to the Dean of that school that that particular subject was improperly taught.

To refresh your memories, we will briefly review the requirements of the A. M. A., as laid down by the Council on Medical Education:

As a minimum requirement for entrance into a medical college:

1st. A high school education or such education as will admit a student to one of our recognized universities.

2nd. This requirement to be passed upon by specially designated authorities, such as the Superintendent of Public Instruction or his representative, and not by the faculty of the medical college.

3rd. A four-year course in a medical school, each year of 30 weeks, of 30 hours per week (exclusive of holidays). No two courses to be taken the same year.

4th. The graduation from such an approved school should simply entitle the candidate to an examination before the State licensing board.

5th. The passing of a satisfactory examination before a State licensing board and the securing of a license to practice.

It was further recommended that the effort be made to make these requirements effective by January 1, 1908.

For the session of 1907-08, Flint Medical College (colored), through its Dean, announced at least 30 weeks, exclusive of holidays. Its course for 1907-08 covers four years and has a total of 3130 hours, averaging $26\frac{5}{6}$ per week.

Tulane Medical College has announced 30 weeks, with one week of holidays. Its total number of hours, we are assured, will exceed that of last year, as given above.

The improvements announced by the Tulane Board of Administrators mark the beginning of a new era in medical education here, and we briefly review them as follows:

"A Chair of Orthopedic Surgery and Surgical Diseases of Children; a Chair of Anatomy, the incumbent to give his whole time to teaching anatomy and none to practice; a Chair of Ophthalmology; separate Chairs for Obstetrics and Gynecology; separate Chairs for Physiology and Pathology and Pathological Anatomy; a Chair of Biology for Medical and Academic Departments; the Schools of Chemistry of the Academic and Medical Departments are to be consolidated and subdivided into appropriate divisions of Medical, Pharmaceutical, Scientific and Academic.

"The first two years will be taught on University Campus, with some clinical instruction in the second year.

"It is the policy of the Board to appoint leading physicians from time to time as clinical lecturers. The Board finds it is not practicable to bring about a complete reorganization of the Medical Department for the Session of 1907-08, for the reason that there must be constructed adequate laboratories of modern instruction in physiology, anatomy, biology, pathology, etc., and neither these nor the proper paraphernalia can be adequately provided before October, 1908."

In a letter dated January 7, 1907, the Secretary of the Council

on Medical Education urges us to lay before you and beg your assistance to have the entrance requirements to a medical college to be passed upon by some other than the medical faculties incorporated as a part of the law of the State. We believe this can be done by having the law creating the State Medical Examining Board amended so as to empower the Board to pass on the entrance qualifications of intending matriculants of all medical schools domiciled in the State.

We especially recommend that you endorse this and instruct your Committee on Legislation to take the necessary action.

Respectfully submitted,

(Original signed) JOHN CALLAN, M. D.,
Chairman;
S. W. STAFFORD, M. D.;
ISAAC IVAN LEMANN, M. D.

The report of the Committee on Medical Education was referred to the Council.

The Secretary then read communications from the Bureau of Medical Organization, American Anti-Tuberculosis League, and from the physicians resident in the western portion of Catahoula Parish.

The letter from Catahoula Parish was referred to the Council.

DR. LAZARO presented a brief verbal report of the meeting of the Anti-Tuberculosis League, which he attended as a delegate from this Society.

DR. MARTIN called attention to the Southern Medical Association now in process of formation.

DR. GRANER reported that he had received two letters from Dr. Fridge requesting a reopening of his case, which had been acted on by the Council, and he stated that the Council was without jurisdiction, asking for instructions. Upon motion of Dr. Parham, the letters were referred back to the Council with the request that the Council make a recommendation.

Applications were presented for membership by Drs. W. E. Tatum of Sabine, and I. H. Levin of St. Mary, being from unorganized parishes.

Upon motion of the Secretary the applications were referred to the Council.

The morning session then adjourned.

AFTERNOON SESSION, MAY 14.

The afternoon session was called to order at two o'clock.

Section on General Medicine.

DR. J. B. ELLIOTT, JR., discussed "Treatment of Chronic Heart Disease."

DR. S. L. WHITE read the paper on "Diagnosis of the Diseases of the Heart," by Drs. S. L. White and Thomas Ragan.

These papers were discussed by Dr. Dupaquier.

DR. JOHN L. SCALES read a paper on "The Treatment of Pneumonia, Especially in Children."

DR. L. G. LEBEUF read a paper entitled "Syphilis, with Symptomatology and Treatment," which was discussed by Drs. Parker, Dupaquier, A. J. Perkins, Martin, Nelken, Menville, Fossier, Gremillion, Kimbell, Gessner and Weis.

DR. J. E. KNIGHTON read a paper on "Diphtheria," which was discussed by Drs. Lazaro, A. J. Perkins, R. G. Hawkins, C. J. Gremillion, Kimbell, Willis, Elliott, Sr., Dempsey, Thornhill, Mayer, McVea, Craig and Seay.

DR. DUPAQUIER read a paper entitled "Two Cases of Infective Arthritides and Pleurisy, Not Rheumatic, Not Gonorrheal, Not Tubercular," which was discussed by Drs. Oechsner, Hatch and Trahan.

The afternoon session then adjourned on motion.

EVENING SESSION, MAY 14.

Meeting called to order at eight o'clock, President Bruns in the chair.

President Bruns introduced Dr. W. S. Thayer, of Baltimore, Md., who read a paper entitled "The Importance of Physical and Psychological Therapeutic Methods."

A vote of thanks was extended to Dr. Thayer.

Upon motion of Dr. Mayer, Dr. Thayer was elected to honorary membership.

DR. I. I. LEMANN read a paper entitled "Chlorosis: Its Diagnosis and Treatment," which was discussed by Drs. Simon, A. J. Perkins.

DR. LAZARO read a paper on "Charlatanism."

DR. BARRIER moved that the meeting adjourn to go in a body to the Chess Club, which motion was carried.

(To Be Continued.)

AVOYELLES PARISH MEDICAL SOCIETY.

THE AVOYELLES PARISH MEDICAL SOCIETY met in regular quarterly session at Mansura on Thursday, July 4th. This being Ladies' Day, each member was accompanied by his wife or sweetheart. The ladies were entertained at the residence of Dr. T. A. Roy by his gracious wife who surrendered her hospitable home for their comfort. Twenty-two physicians answered roll call. The following physicians applied for membership and were elected:

Mrs. Dr. A. S. Kiblinger, Plancheville; S. J. Mayeux, Moreauville; W. L. Wharton, Bordelonville; J. W. Planche, Plancheville; M. A. Saucier, Marksville.

The subject discussed at the meeting was "Treatment of Tuberculosis." Dr. W. F. Couvillion was essayist and Dr. T. A. Roy opened the discussion which was taken up generally by all present. Upon invitation, Dr. Fred Mayer of the State Board of Health, was present and delivered one of his masterful addresses on the subject of tuberculosis and typhoid fever. At the close of his address, he was unanimously elected an honorary member of the Society.

At 12:30 the members, their wives and guests were served with an elegant banquet at the residence of Mr. Regard, where set toasts were delivered by Drs. C. J. Ducote, Emil Regard, Fred Mayer and T. L. Langard. At the afternoon session, resolutions were adopted endorsing the object and purposes of the State Anti-Tuberculosis League; authorizing the delivery of lectures by members of the Society before the High Schools of the Parish on sanitary subjects and authorizing the chair to appoint one member at each meeting to deliver a talk on Medical ethics. A communication from the Avoyelles Dental Society through Dr. Seiss was read asking that whenever practicable to refer cases of tooth extraction to members of that body. It was carried.

The Society meets next at Marksville on Thursday, Oct. 3rd.

Operations on tubes and ovaries will be discussed. Dr. G. R. Fox will prepare an essay and Dr. M. E. Saucier will open the discussion.

Medical News Items.

DR. JAMES CARROLL HAS RECEIVED THE DEGREE of LL. D. from the University of Nebraska in recognition of his high service in yellow fever.*

THE MCGILL UNIVERSITY HAS PLANNED A NEW BUILDING for its Medical School, the construction of which will begin at an early date. The cost is estimated at \$500,000.00 and the Medical Department has established a five year course, the fifth year to be devoted entirely to hospital work.

THE THIRTY-SECOND ANNUAL MEETING OF THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will be held at Columbus, O., October 8, 9 and 10, 1907, under the presidency of Dr. H. Horace Gant, of Louisville, Ky. The orator in Medicine will be Dr. Geo. F. Butler, of Chicago, Ill., and the orator in Surgery, Dr. Frank D. Smythe, of Memphis, Tenn.

The association is doing commendable work in furthering the cause of medical research, by offering a prize of \$100.00 for the best original essay upon some medical or surgical topic.

Preparations are being made on an extensive scale for the entertainment of members and guests by the profession of Columbus.

A large list of papers has already been offered and there are many promises for papers from other well-known men in the Valley.

THE TEXAS STATE MEDICAL EXAMINING BOARD, recently appointed, is composed of the following members: Dr. James D. Osborne, Cleburne; Edwin P. Becton, Greenville; William B. Collins, Lovelady; Garland B. Foscue, Waco, and John J. Dial, Sulphur Springs, of the regular school; Drs. John D. Mitchell, Fort Worth, and

*Since going to press the painful news of Dr. Carroll's sudden death was received.

Thomas J. Crowe, Dallas, of the homeopathic school; Drs. Marquis E. Daniel, Honey Grove, and J. P. Rice, Fredericksburg, of the eclectic school; Dr. Radford O. Braswell, Mineral Wells, of the physio-medical school, and R. W. Collins, El Paso, an osteopath.

INSURANCE FEES RESTORED. The Union Central, Equitable and Fidelity Mutual Life Insurance Companies have recently advanced their medical insurance examination fees to \$5.00. The standard companies seem to be falling in line.

HIS HIGHNESS PRINCE HENRY ZU SCHONAICH-CAROLATH has consented to act as President of the XIVth International Congress for Hygiene and Demography. Dr. Rubner, Privy Councillor of Medicine, Professor of Hygiene at the Royal University of Berlin, and Professor Dr. von Mayr, Under-Secretary of State, Munich, will be Vice Presidents.

THE UNITED STATES CIVIL SERVICE COMMISSION announces an examination on October 23-24, 1907, to secure eligibles from which to make certification to fill a vacancy in the position of anatomist (male), at \$1,600 per annum, in the Army Medical Museum, office of the Surgeon-General, and other similar vacancies as they may occur there. In this State they will be at New Orleans, Shreveport and Baton Rouge.

The examination will consist of 1. Human anatomy, on the first day. 2. Anatomical drawings (competitors will be required to make a pen-and-ink drawing from a photolithograph which will be furnished; 3. Gross pathology (of tissues); 4. Construction, care, and use of microscope (questions relating to the compound microscope, with knowledge of various makes in general use); 5. Training and experience (rated on application), on the second day.

Age limit 20 years or over. Only male applicants will be admitted. It is desired that the person appointed should be young, in good health, have a thorough knowledge of anatomy (preferably, but not necessarily, a graduate in medicine), be able to make anatomical drawings, understand microscopes, surgical instruments and appliances, and be able to prepare, card, and keep in order the anatomical specimens of the museum.

This examination is open to all citizens of the United States who comply with the requirements.

This announcement contains all information which is communicated to applicants regarding the scope of the examination, the vacancy or vacancies to be filled, and the qualifications required.

Applicants should at once apply either to the United States Civil Service Commission, Washington, D. C., or to the secretary of the board of examiners at the places mentioned for application Form 1312. No application will be accepted unless properly executed, including the medical certificate, and filed with the Commission at Washington.

As examination papers are shipped direct from the Commission to the places of examination, it is necessary that applications be received in time to arrange for the examination desired at the place indicated by the applicant.

THE MEETING OF THE THIRD DISTRICT COMPONENT SOCIETY OF THE STATE DENTAL SOCIETY was held in Morgan City and had a good attendance. A number of men from this city were there. Dr. S. J. Bourgeois was elected president and the place for the next meeting was fixed at Franklin, La.

THE NEXT MEETING OF THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS will be held October 15 and 16 of this year. The Examining Board consists of Drs. A. F. Barrow, of St. Francisville, President; F. M. Thornhill, of Arcadia, Vice President; O. D. Simmons, of Baton Rouge; E. L. McGehee and Felix Larue, secretary, of this city.

TYPHOID FEVER IN CHICAGO.—September is the worst month for typhoid fever in Chicago and there were forty-two deaths during the first week of the month.

ADMITTED TO CONFERENCE.—The New Orleans College of Pharmacy has been admitted to the Conference of the American Pharmaceutical Faculties.

REMOVAL OF QUARTERS.—The Homeopathic Hospital and Dispensary Association has announced the removal of its quarters from No. 547 Jackson Avenue to No. 1302 Canal St., corner of Franklin.

THE MISSISSIPPI MEDICAL COLLEGE at Meridian has purchased a lot to build a hospital.

THE NEW HOSPITAL BUILDING FOR THE INSANE AT JACKSON, Miss., has been completed.

PERSONALS: Dr. and Mrs. Felix Larue are home again from a tour in the eastern resorts.

Dr. R. A. Hilton resigned from the State Medical Board of Arkansas and Dr. J. C. Wallace takes his place.

Governor Blanchard appointed E. S. Lewis, M. D., and Charles A. Farwell members of Hospital Board of New Orleans, to fill existing vacancies.

Dr. M. M. Jones has been elected superintendent of the Georgia State Sanitarium for the Insane, at Milledgeville, to succeed the late Dr. T. O. Powell.

Dr. W. H. Dalrymple, of Baton Rouge, has been elected President of the American Veterinary Medical Society.

Dr. Susanna Otis sailed on the *Comus* for New York during the month. She will visit Boston and Philadelphia before returning.

Dr. Jules Lazard sailed recently on the steamship *Antilles* for New York where he will remain for a few weeks.

Dr. Edwin S. Hatch sailed during the past month on the *Proteus* for New York. He will be away for a short vacation.

Dr. L. Kaffie, one of the physicians at Jackson Asylum for the Insane visited friends in this city last month.

Dr. J. H. White, U. S. P. H. & M. H. S., went to Milledgeville, Georgia, his old home, to spend his vacation.

Dr. C. C. Bass is doing postgraduate work in London.

Dr. L. Perrilliat has been visiting the hospital clinics in the North and East.

Dr. I. I. Lemann has returned from his vacation and has resumed his practice. The doctor has moved his office to the Perrin Building, No. 303 Baronne Street.

Dr. V. Wakamura, a chemist of the Japanese government, visited New Orleans last month.

Dr. G. B. LeSueur has moved from Baton Rouge to Gonzales to practice. Dr. J. M. Ehlert has located at Dutchtown, La., and Dr. J. H. Davis at Dodson.

Dr. L. G. LeBeuf is spending his vacation in the North.

Among the doctors who attended the meeting of the American Dermatological Association were Dr. Isadore Dyer and Dr. Henry E. Ménage.

Dr. E. O. Trahan spent the last month in Boston visiting the Infants' Hospital.

Dr. C. J. Miller is in New York on his vacation.

Dr. S. M. Fortier has moved to the Perrin Building. Dr. Joseph Holt, Dr. J. B. Guthrie, C. V. Unsworth and J. T. Halsey will also have offices in the Perrin Building.

MARRIED.—The marriage of Dr. Francis J. Kearney, of Plaquemines took place on the 17th of the past month to Miss Beatrice Levert.

Dr. Oscar W. Bethea and Miss Ruby Hardee were married at Meridian, Mississippi, on the 30th of August.

DIED.—Dr. R. J. Young, of Abbeville, La., died on the 1st of September, aged 37 years.

Dr. Wm. Yandell, of Canton, Mississippi, died during the past month, aged 32. Dr. Yandell was a graduate of Tulane.

Dr. W. E. Flowers, of McComb City, died there, aged 41.

THE NEW ORLEANS CLINICAL LABORATORY has sent out announcements stating that they have moved their laboratory to the Perrin Building at No. 303 Baronne Street where they will be glad to see their patrons.

Publications Received.

LEA BROS. & CO., Philadelphia and New York, 1907.

A Text Book of Physiological Chemistry for Students of Medicine and Physicians, by Charles E. Simon, B. A., M. D., 3d Edition.

A Manual of Clinical Diagnosis By Means of Microscopic and Chemical Methods, by Charles E. Simon, B. A., M. D., 6th Edition.

A Practical Treatise on Fractures and Dislocations, by Lewis A. Stimson, B. A., M. D., LL. D., 5th Edition.

J. B. LIPPINCOTT CO., Philadelphia and London, 1907.

International Clinics, Vol. III, 117th Series, 1907.

P. BLAKISTON'S SON & CO., Philadelphia, 1907.

Pharmacology and Therapeutics. by Reynold Webb Wilcox, M. A., M. D., LL. D.

Anatomy of the Brain and Spinal Cord, by Harris E. Santee, M. D., Ph. D.

Human Anatomy, edited by Henry Morris, M. A. and M. B., Lond. F. D. C. S., Eng. and J. Playfair McMurrich, A. M., Ph. D., 4th Edition, 3d, 4th and 5th Vols

Manual of Surgery, by Francis T. Stewart, M. D.

Materia Medica and Pharmacy, by Reynold Webb Wilcox, 7th Edition.

G. P. PUTNAM'S SONS, New York and London, 1907.

Hygiene of Nerves and Mind in Health and Disease, by August Forel, M. D. (Authorized translation from second German Edition, by Herbert Austin Aikins, Ph. D.)

E. B. TREAT & CO., New York, 1907.

Transactions of the American Pediatric Society, 18th Session, 1906. Edited by Linnaeus Edford La Fetra, M. D. Vol. XVIII. (Reprinted from *Archives of Pediatrics*, 1906-07.)

MISCELLANEOUS.

Physicians' Manual of the Pharmacopœia and the National Formulary, by C. S. N. Hallberg, Ph. G., M. D., and J. H. Salisbury, A. M., M. D. (American Medical Association, Chicago, Ill., 1907.)

Index Catalogue of the Library of the Surgeon General's Office, U. S. A., 2d Series, Vol. XII; O-Periodicals. (Government Printing Office, Washington, D. C.)

Thirtieth Annual Report of the Board of Health of the State of New Jersey, 1906, and *Annual Report of the Bureau of Vital Statistics* (The Jno. L. Murphy Publishing Co., Trenton, N. J., 1907.)

Five Hundred Surgical Suggestions, by Walter M. Brickner, B. S., M. D., and Eli Moschowitz, A. B., M. D. (Surgery Publishing Co., New York, 1907.)

A Prayer to Diabolus; Silent Prayer to the Liquor Trade to His Satanic Majesty. (Page A. Cochran, Publisher, Essex Junction, Vermont.

Final Announcement of the Thirty-fifth Annual Meeting of the American Public Health Association, To Be Held at Atlantic City, N. J., September 30 to October 4, 1907.

Third Annual Report of the Henry Phipps Institute for the Study, Treatment and Prevention of Tuberculosis, February 1, 1905 to February 1, 1906.

Reprints.

The Conservative Treatment of Chronic Suppuration of the Middle-Ear Indications for the Employment of Adrenalin Chlorid, In Conjunction, With Cocain, In Operations on the Eye, by Dr. Samuel Theobald.

Urethral Hemorrhage, (2) Massage of the Prostate and Stripping the Seminal Vesicles, (3) The Prevention of Venereal Diseases, (4) Urethral Dilatations With Expansible Instruments, (5) The Emergency Dilatation of Urethral Stricture, by Ferd C. Valentine, M. D., and Terry M. Townsend, M D.

The Treatment of Gonorrheal Epididymitis, by Julius J. Valentine, M. D.

Education in Sexual Subjects, by Ferdinand C. Valentine, M. D.

The Medical Man Afloat, by H. Sheridan Baketel, M D.

The Contamination of the Air of Our Cities with Sulphur Dioxid, the Cause of Respiratory Disease, by Theodore W. Schaefer, M. D.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)
FOR AUGUST, 1907.

CAUSE.	White.	Colored.	To al.
Typhoid Fever.....	17	10	27
Intermittent Fever (Malarial Cachexia)		5	5
Smallpox.....			
Measles.....			
Scarlet Fever.....			
Whooping Cough.....	7	6	13
Diphtheria and Croup.....	2		2
Influenza.....		1	1
Cholera Nostras.....	1	1	2
Pyemia and Septicemia.....	1	1	2
Tuberculosis.....	46	28	74
Cancer.....	22	6	28
Rheumatism and Gout.....		1	1
Diabetes.....	3		3
Alcoholism.....	8	1	9
Encephalitis and Meningitis.....	9	1	10
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	12	9	21
Paralysis.....		2	2
Convulsions of Infants.....	1	3	4
Other Diseases of Infancy.....	31	13	44
Tetanus.....	2	2	4
Other Nervous Diseases.....	3		3
Heart Diseases.....	42	35	77
Bronchitis.....	8	6	14
Pneumonia and Broncho-Pneumonia.....	18	21	39
Other Respiratory Diseases.....	2	2	4
Ulcer of Stomach.....	1		1
Other Diseases of the Stomach.....	2	5	7
Diarrhea, Dysentery and Enteritis.....	38	12	50
Hernia, Intestinal Obstruction.....	3		3
Cirrhosis of Liver.....	7	7	14
Other Diseases of the Liver.....		1	1
Simple Peritonitis.....	2	2	4
Appendicitis.....	2		2
Bright's Disease.....	15	18	33
Other Genito-Urinary Diseases.....	6	3	9
Puerperal Diseases.....	3	7	10
Senile Debility.....	13	7	20
Suicide.....	5		5
Injuries.....	32	26	58
All Other Causes.....	12	7	19
TOTAL.....	376	249	625

Still-born Children—White, 22; colored, 20; total, 42.

Population of City (estimated)—White, 251,000; colored, 90,000; total, 341,000.

Death Rate per 1000 per annum for Month—White, 17.98; colored, 33.20; total, 21.99.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 30.04
Mean temperature 83.
Total precipitation 5.53 inches.
Prevailing direction of wind, west.

*Paullum sepulture distinetur
Celsa virtus. — HORACE.*

New Orleans Medical and Surgical

Journal.

ESTABLISHED IN 1844.

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NOVEMBER, 1907.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

(Established in 1844.)

Official organ of the Louisiana State Medical Society
and of the
Orleans Parish Medical Society

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New Orleans Medical and Surgical Journal.

VOL. LX.

NOVEMBER, 1907.

No. 5

Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a ~~WRITTEN~~ order for the same accompany the paper.)

Bacteria Carried on Appendages of *Musca Domestica* (Domestic Fly).*

By E. P. A. FICKLEN, B. Sc., New Orleans, La.

One of the most interesting questions before the scientific world to-day is that of the spread of disease. Since the discovery of bacteria as the chief factor in so many of the evils that sap the vitality of mankind, the search has been steady for "germ carriers," for the means by which bacteria are conveyed from the sources of infection to the healthy host. The air, with its myriads of particles of dust, and the water, with its impurities, were first fixed upon to explain the conveyance of organisms from one locality to another, but it was found that this explanation was not alone sufficient. Obviously, a far more potent cause of disease would be a *living* thing, which came into contact with both uninfected material and material liable to infection. If, in addition,

*Graduation Thesis, Tulane University, 1907.

this living thing were especially numerous in the vicinity of human habitations, its capabilities as a germ carrier would be many times multiplied, and *Musca domestica*, the common house fly, fulfils all those conditions. It has, therefore, been chosen as the subject of these investigations.

PART I. HISTORICAL.

A thorough and scientific monograph, by George H. F. Nuttall, published in the *Johns Hopkins Hospital Report*, Vol. VIII, on the rôle of Insects, Arachnids and Myriapods, as carriers in the spread of bacterial and parasitic diseases of men and animals, is the outcome of a series of investigations heralded by Montfils in 1776. For many years works on this subject were theoretical and speculative rather than experimental. The methods used by the bacteriologists were imperfect, and opinions were accepted with much less evidence to substantiate them than would now be required. It was then thought that the mere fact that flies not only congregated in places of filth and pestilence, but also frequented food and articles used almost hourly by man, was enough to prove that they were dangerous, and that precautions should be taken against them. A demand soon grew, however, for positive experimental evidence of the exact rôle of flies as germ carriers. In spite of this, much work, even at the present day, has been conducted in such a haphazard and unscientific manner, that positive conclusions can be drawn from very few of the results.

The first investigations by scientists were conducted with reference to *stinging* flies, some of them imaginary, such as the "*furia infernalis*," insect described by Linnaeus, and some of them real, such as "*Tabanus bovinus*," and "*T. pluviatilis*." No positive conclusions were reached for many years. Investigators took violently opposed stands, with no more grounds for their opinions than hearsay furnished them. However, an interesting statement was made by Joseph in 1887. He said that non-biting flies [*M. domestica*, etc.] may cause infection by carrying the bacilli [in this case of anthrax] and depositing them on wounds, these latter being necessary. In 1869 Raimbert had begun the experimental work which has borne much fruit. He placed non-biting flies in a ves-

sel containing anthrax blood to which water had been added, and found anthrax in preparations of the proboscides two hours afterwards. Later he observed living bacilli in the excreta. Davaine (1870) inoculated guinea pigs with the proboscides, legs, and wings of flies removed directly from a bell-jar containing anthrax. Nuttall sums up the matter by saying that it may be accepted as proven that ordinary flies [*M. domestica* and the like"] may carry about and deposit the live bacillus of anthrax in their excrements, or cause infection through their soiled exteriors coming into contact with wounded surfaces or food.

Yersin, a Japanese bacteriologist, in 1894, concluded that flies were susceptible to the plague. His experiments were not convincing, but his deductions were confirmed in 1897 by Nuttall, who proved that infected flies succumbed to the disease after varying periods, depending on the temperature, and that flies contained virulent bacilli 48 hours and more after they had been fed on infected organs and had been kept in clean vessels.

Marpmann (1884) believed that flies carried hog erysipelas, but no proof, except analogy with the carrying of anthrax, was produced. Later, in 1897, he fed flies with *B. septicus* (allied to *B. Metschnikovi*), in pure culture in peptone water. On inoculating mice with the contents of these flies, death was produced. These experiments are not reported with any accuracy, and the conclusions drawn are vague and unjustified. Marpmann stated that he had proved that *B. prodigiosus* and *B. fætidus* passed through the alimentary tract of the fly alive and uninjured. Celli, (1888), reported the same of *Staphylococcus pyogenes aureus*.

A typical case of suspicion developing into certainty is shown in the case of cholera. As early as 1853, the *Lancet* contained an article describing flies as being dangerous in times of cholera epidemic. Nicholas wrote of the epidemic at Malta in 1849: "My first impression of the possibility of the transfer of the disease was derived from the observation of the manner in which these voracious creatures, (flies), present in great numbers, and having equal access to the dejections and food of the patients, gorged themselves indiscriminately, and then disgorged themselves on the food and drinking vessels." He also observed that the spread of cholera on board a vessel decreased with the disappearance of the flies. Mad-

dox, 1885, fed *M. vomitoria*, and *Eristalis tenax* on cultures of the cholera spirillum. He seems to have found motile spirilla in the dejecta of the insects. Sawtchenko made more accurate experiments in the same line, and got results also, which proved that the *vibrio Metschnikovi* retained its virulence after passing through the alimentary canal of the fly. The experiments of Uffelman (1892), and Macrae (1894), proved beyond a doubt that flies can carry the spirilla and with them infect meat or milk.

Typhi abdominalis was found in the contents of flies as early as 1888, by Celli. Many subsequent experiments verified the results. Tuberculosis was found on *M. domestica* and in its dejecta in 1887 by Spillman and Haushalter. Lastly, Celli proved that *B. anthracis*, *spirillum Finkler-Prior* and *pyogenes aureus* still retained their virulence after passing through the intestine of the fly.

Up to the present time, the above are the bacteria which have been traced conclusively to *M. domestica*. My initial experiments were made chiefly to determine what bacteria the normal housefly, living in normal surroundings, carried on its appendages. The flies used were all caught in the biological laboratory of Tulane.

PART II. THE FLY; DESCRIPTION.

The common housefly merits investigation for two reasons: its close association with man, and its structure, which fits it peculiarly for the conveyance of bacteria.

On the first point I need lay no stress. No one can avoid noticing the swarms of these insects, especially numerous in the vicinity of stables, which, during the summer, infest not only the country districts, but are present also in the rooms of city dwellings which are otherwise scrupulously clean. The wing power of the fly is so great that the fact that no infection is in the immediate vicinity is no preventive of danger. In reality, there is probably not one house in a thousand that has not an abundance of filth accessible to flies within a hundred yards of its kitchen and its dining room.

The word appendages, in the title of this paper, deserves emphasis. My investigations have been for the most part of cultures made from either the proboscides, the wings, or the tarsi of the flies examined. Proboscides and legs are of course the most potent

sources of infection, as they come into immediate contact both with the infected material, and with the material to be infected. The wing would, in general, be only secondarily contaminated, except with organisms whose habitat is the air, but cleaning and stroking the wings with the legs, characteristic of the fly, is likely to transfer organisms from one to the other. Examination of a culture made by dropping the entire fly into bouillon, would give instructive, but not conclusive results, for it is plain that a fly carrying disease germs on its body or wings might easily walk over sterile material without infecting it, whereas, if pathogenic bacteria are found on the pulvilli, on the labella, or in the dejecta of the fly, the chances of non-infection are reduced to a minimum.

M. Domestica belongs to the order of insects known as diptera, or two-winged. This species breed exclusively in the manure of equine animals. The theory that flies lay in the cracks of floors has been long discredited. Footless larvæ, known as maggots, hatch from the eggs within a day, and feed by means of rudimentary mouth parts. During the first seven days the larvæ molt twice, and grow rapidly. At the end of that time they pass into the inactive pupal stage within the larval skin. A week more elapses before the perfect insect emerges, making the metamorphic cycle last about fifteen days. The imagoes soon lay eggs. Prof. Jordan, of Leland Stanford, Junior, University, says: "If each of the progeny of the common housefly should find the food and temperature it needed, with no loss, and no destruction, the people of a city in which this might happen could not get away soon enough to escape suffocation."

The body of the fly is divided into the head, the thorax, and the abdomen. On the head are situated two large compound eyes, each bearing about five hundred facets. Besides these compound eyes, there are three ocelli, or simple eyes, bearing each a single facet. The thorax is divided into the *pro*, the *mesa*, and the *metathorax*. The wings are borne on the mesa-thorax. Immediately posterior to the wings, and carried on the meta-thorax, are found the balancers, two small club-like projections, the remnants of an atrophied pair of wings. The abdomen consists of ten segments, the last of which bears the organs of reproduction and the anus. Each

segment of the thorax bears one pair of legs, which are known respectively as the fore, middle, and hind legs. Each leg consists of five parts. The short, thick, coxa attaches the leg to the thorax; the next segment is known as the trochanter, the next two take the names of human leg bones, femur and tibia. Distal to the tibia is the tarsus, consisting of five small segments, the last of which bears two thick, spongy, roughly triangular pads known as pulvilli. The ventral surface of these carries large numbers of minute hairs, and is coated with a mucilaginous adhesive secretion. A better carrier for germs could hardly be devised. The theory is tenable that the moisture in this secretion would be sufficient to preserve organisms which could not otherwise be conveyed in a virulent condition, on account of their slight resistance to dessication, as, for instance, the bacilli of tuberculosis. This hypothesis, however, would necessitate a considerable amount of careful experiment. It can be seen from the above description that the popular belief that flies adhere to walls, ceilings, or panes of glass by means of cupping discs corresponding to the actabula of the cephalopoda, is entirely erroneous. Besides the pulvilli, the last segment of the tarsus bears, on its upper surface, two stout claws, and a slender bristle, the empodium.

The wings of the fly merit little attention. They are thin, chitinous sheets, strengthened by a network of stouter chitinous veins. They are of course exposed to sunlight, which is fatal to all bacterial micro-organisms. The proboscis is more protected, and through its structure, more adapted to carrying bacteria. It consists of a sheath, at the end of which is a "mass of chitinous lamellæ, through which run spirally coiled rods, radiating from a horse-shoe-shaped rim. By the rasping action of this, the fly obtains food. The mouth-parts are modified into a sucking organ, and the fly therefore generally feeds only on liquid or moist substances. By means of saliva conveyed to the end of the sheath, and distributed by the labella over food, soluble substances, such as sugar, are taken up" [Thesis, Rudolph Anderson, Tulane, '06.]. It should be noticed that *Musca domestica* does not bite. The conformation of the mouthparts make this impossible. We can, therefore, in view of the preceding facts, reach the conclusion that infection by means of flies can take place only in the following ways:

1. By direct normal contact.

Under this head is included all infection that might be conveyed by the walking or feeding of the fly on exposed surfaces of the body.

2. Intravenous or subcutaneous infection.

A prerequisite for this is an abnormal condition of the skin, such as an abrasion, a wound, or a suppurating pustule, since the house-fly can not pierce the healthy skin.

3. Indirect infection.

This is probably the most likely source of fly infection. I have included under it all contamination of food or drink. In this case the fly does not directly deposit the bacteria on the host.

PART III. THE BACTERIAL FLORA OF THE HOUSE FLY.

In the pursuit of this work it was, of course, essential that the methods employed should establish without fail the identity of the organisms found.

The conditions under which the experiments were conducted would not have revealed the presence of the anaerobic bacteria, and the spores of this genus, if present, escaped detection, but the comparative rarity of these renders the dangers from them small in proportion.

Throughout the work the strictest attention to bacteriological details was observed, which, however, it is unnecessary to relate here at large. The results of this work establish a varied and interesting bacterial flora which is as follows:

1. *Bacillus aurantiacus*.

Habitat usually given as water. Was found on the legs of a fly.

2. *Sarcina lutea*.

Habitat usually given as air. Was found widely spread on all of the appendages.

3. *Aspergillum*, a mold common in decaying vegetation.

4. *Bacterium crinatum*.

Habitat, water. Found on wing of fly.

5. *Bacillus tenuis*.

Habitat given by Chester: "Milk and cheese." Found on legs of many of the flies.

6. *Micrococcus coralinus*.

Chester gives as habitat: "Isolated from a contaminated plate culture."

7. *Micrococcus kefersteinii*.

Habitat usually given as red milk.

8. *Bacillus teptosporus*.

Found on proboscis and legs of a fly. Chester gives as its habitat: "a culture contamination."

9. *Sarcina subflava*.

Habitat, soil.

10. *Sarcina aurantiaca*.

Habitat, air.

11. *Bacillus sublanatus*.

Habitat, water.

12. One of the *Microspiræ*.

Although much data was gathered concerning the characteristics of this organism, its species remained undetermined. Microscopically it was demonstrated to be an active motile bacillus, slightly curved, and from $2\frac{1}{2}$ to 3 micra long. Its most characteristic growth was found in gelatin stab cultures, which developed as follows: On the surface, after 24 hours, a few isolated colonies around a white, moist, irregular button. Along line of stab, many minute, round, colonies, which later formed cirrus-like, stratified, light-brown masses. After seven days, the surface button becomes slightly sunken, and in three days more crateriform to stratiform liquefaction sets in. At the bottom of the liquid gelatin masses of brown sediment appear, and liquefaction progresses until in a short time it is complete.

13. An organism which showed the cultural and microscopic characteristics of *Bacillus endocarditis griseus*. It was thought so remarkable that such an organism should be found on a fly that we decided to make "assurance doubly sure" by inoculation tests on animals. This was done in the usual manner and resulted in one instance in the death of the guinea pig in 21 hours. Cultures obtained at autopsy and grown in bouillon failed, however, in immediate action, death of the animals not occurring until four weeks later. The organism recovered from these failed to answer the tests of the original and therefore the identity of the organism remained doubtful.

The attenuation of the culture by cultivation on artificial media is the only explanation I can offer for the failure of Koch's third postulate.

PART IV. ADDITIONAL EXPERIMENTS.

EXPERIMENTS WITH *MICROSPIRA METSCHNIKOWI*.

Twelve flies were caught on or near the body of a guinea pig which had died of chicken cholera. The inner surfaces of the body had been exposed by a post-mortem examination. The flies were captured by means of a wide-mouthed test-tube, and were etherized until they became torpid. They were then allowed to slip into bouillon tubes. The following day, March 8, one of the tubes was examined. It showed a practically pure culture of *Metschnikovi*. The other cultures were not replaced in the incubator, and were examined the next day. A coccus had developed by standing at room temperature, and had greatly retarded the growth of the spirillum, as was evidenced by a large number of involution forms of chicken cholera. However, eleven out of the twelve flies, or 91.6 per cent. showed the characteristic *Microspira*.

Three other flies, designated as "F," "G" and "H," were caught at the same time and dissected with great care in order that they might not become additionally infected. "F" and "G" were caught while feeding on the liver and heart, respectively, of the guinea pig. The legs and wings of these flies yielded practically pure cultures of chicken cholera, as did the proboscides. The foreleg of "H" gave an almost uncontaminated plate of *Metschnikovi*.

ANTHRAX ON FLIES.

Guinea pig died of anthrax night of Saturday, March 9. Autopsy held Monday, March 11, at 3 p. m. Blood and heart were left on the dissecting table with the intention of attracting flies. One fly was caught just after having fed on the blood. This fly was known as "I," and was dissected carefully. The proboscis and foreleg were placed in bouillon and a culture was made from excreta voided about ten minutes after the fly had been seen feeding on blood. This excreta was sterile, but the foreleg and proboscis yielded almost pure cultures of anthrax. The other fly "J," was kept in

the capture tube twenty hours. A bouillon culture of the entire body yielded a streptococcus, but no anthrax.

HOG CHOLERA ON FLIES.

For these experiments a simple cage was used, which had been devised by Prof. Beyer. It differed from a regular insect cage, in that it was divided into two compartments by a partition in which was a pivoted door that could be opened and shut from the outside. For the first experiment a moist potato culture of cholera *suis* was placed in one compartment, and four flies were allowed to feed on it. After from 25 to 30 minutes of contact with the culture, the flies were driven through the partition door into the other side of the cage, where a sterile agar plate had been placed. The flies fed on the agar cautiously, touching it only with proboscides and forelegs. Four minutes elapsed between their contact with infected and with uninfected material. The petri dish was covered and placed in the incubator. In twenty hours the characteristic colonies of *suis* had developed at all the points of contact. Microscopical examination of these colonies showed pure cultures.

EXPERIMENT 2. Three flies were caught and placed in the right hand compartment with a petri dish containing an old agar colony of *suis*. The flies fed greedily and walked over the culture. They were then driven to the other side of the cage and allowed to feed on milk, after eight minutes had elapsed. They ate greedily until their abdomens were distended and some of the milk was disgorged. Bouillon cultures were made of small quantities of the milk and the tubes placed in the incubator. Examination the next morning showed copious bacterial development. Plates made from three of the tubes showed practically pure cultures of *suis*.

EXPERIMENT 3. April 3. Allowed four flies to remain in the cage 24 hours with an old potato colony of *suis*. The next day I removed the potato and replaced it with a petri dish of water to prevent the insects from dying of thirst. However, on April 5 only one fly had survived the attacks of the ants, which were very numerous. This fly was allowed to gorge himself on milk, and afterwards, crawling on a petri dish of sterile bouillon, touched the

liquid with a foreleg. An accident interfered with the plating out of the milk, but plates made from the bouillon showed *suis*, and microscopical examination of the milk showed many motile bacilli.

TYPHOID ON FLIES.

May 6. A thirty hour bouillon culture of typhoid was poured into a petri dish and introduced into one side of the cage. Two flies were captured by means of a sterile test-tube and placed in the same compartment. One of them appeared torpid, and was killed. The other fed on the contaminated bouillon greedily, and was then allowed to cross to the other side of the cage, where a dish of sugar water had been placed. This experiment had to be conducted under ant-proof conditions, as it was found that the flies otherwise would not survive.

The fly was allowed to stay in the cage from 4:30 p. m., May 6, to 12 noon, May 9. At the end of that time the fly was captured, washed carefully in bichloride and a bouillon culture made of its abdominal contents. Two cultures were also made from the sugar water on which the fly had fed. All of these cultures were filled with the characteristic growth of typhoid after twenty hours in the incubator, and microscopical examination showed practically pure cultures of the bacillus.

This experiment does not necessarily prove that the fly carried typhoid bacilli from the sixth to the ninth, although such may have been the case. It is far more likely, however, that the fly contaminated the sugar water, and re-infected itself at each feeding, but the initial infection of the sugar water was, in all likelihood, due to the bacteria carried on the proboscis or forelegs of the fly.

SECOND EXPERIMENT WITH TYPHOID. Three flies were left in the same compartment with a petri dish full of a typhoid bouillon culture, for 24 hours. Nothing else to eat or drink was allowed to remain in the compartment. Two of the flies were observed to gorge themselves on the bouillon. The petri dish was then removed, and a piece of ham, which had previously been boiled to effect as complete a sterilization as possible, was substituted. The flies soon lit on it and fed, walking over the greater part of the exposed surface. The ham was then covered and placed in the incubator,

where it remained for four hours. At the end of that time it was torn to pieces with sterilized forceps, and four bouillon cultures were made. Microscopical examination disclosed the motile typhoid bacilli in all four of the tubes. Two tubes were plated out in gelatin and examined after 36 hours. They showed innumerable delicate, minute, translucent, blue-white colonies, which were practically pure typhoid. (In connection with this, it may be mentioned that I have been unable to find any record of previous experiments which bring out as clearly as this the contamination of a food article by a fly carrying typhoid, and which emphasize so markedly the fact that water is not the only source of infection to be feared during an epidemic.)

PART V. CONCLUSION.

In view of the preceding experiments, and of the work mentioned in the historical section of this thesis, I am justified in making a number of deductions. It is of course evident that flies are active agents in the carrying of bacteria. All of the flies examined in warm weather showed one or more species of bacteria on every appendage. It was only during mid-winter that parts of the flies were found sterile. The torpidity and scarcity of these insects, combined with the check that cold weather produces on micro-organic activity renders the danger from fly infection far less during cold weather than during the hot summer months. It is true that the flies caught in the laboratory during the initial experiments carried non-pathogenic bacteria, if we except "endocarditis", which is an unknown quantity, and *M. coralimus*, which is pathogenic to guinea pigs, but the possibilities which the finding of twelve varieties of bacteria on five flies caught at random suggests, cannot be carelessly passed by. If there are disease producing germs accessible to flies they are going to be carried by those flies, and deposited on subsequent feeding places. In times of general health this may not constitute a grave danger, but during epidemics its importance can not be exaggerated. Infection is often already disseminated when sanitary precautions are taken. Disease is spread far and wide before the doctor has arrived at a correct diagnosis of the case.

And now a word as to the second set of experiments. It may

appear that these were conducted too artificially to be of practical use, but they only worked out in the laboratory what may occur at any time in the regular course of events. In every case the flies fed voluntarily on the infected matter, showing that it was palatable to them, and might therefore have been eaten under other conditions. The experiment on hog cholera, in which the fly carried a bacillus, which is liable to dessication, for twenty-four hours, is suggestive as pointing towards the theory outlined before: that the moisture of the adhesive secretion on the pulvilli of the fly is sufficient to check the destructive drying out of the organisms carried. The typhoid experiments, too, are of interest, although this subject has been investigated before. Still, a disease which affects the human race so profoundly can not have its every detail worked out too accurately. If we transfer the final experiment from the cage in the laboratory, to our own dining table, it is not hard to say what the effect would have been on the person who ate the ham over which the infected flies had crawled. The growth of the boullion culture of the organism in the incubator at blood temperature corresponds to the usual typhoid development in the environment supplied by the human intestine. Criminal carelessness is a mild term for the conduct of those who do not exercise the utmost precautions as to flies during an epidemic of typhoid fever.

When we realize the danger from the carrying of bacteria which threatens us during times of widespread sickness, one fundamental conclusion becomes clear. Stringent measures must be taken to eradicate flies. We of the South are especially concerned, for our warm winters force on insects only a brief hibernation. Their capability for doing harm, which corresponds to their activity, extends over the greater part of the year in many of the Southern States. We must realize, too, that extinction, to be efficient in the shortest time possible, must be directed not against the mature fly, but against its breeding, as the slipshod ordinances of New Orleans are directed against the breeding of mosquitoes. The task, however, will be far easier in the case of *M. domestica*, than in that of the *stegomyia*, because of the definite and prescribed breeding places of the former. All horse stables must be strictly supervised, and the manure rendered uninhabit-

able to the eggs and larvae of the fly. Spraying with a strong solution of bichloride of mercury is recommended by most authors.

No matter how effective the method adopted is in theory, a competent corps of inspectors should be appointed to see that practical results are obtained. The average dairyman, or stable owner, thinks only of carrying out the letter, and not the spirit of the law. Sanitation has no meaning to the class of people who should practice it most. Their utter ignorance of the danger from the prevalence of bacterial life unfits them for work which should be carried on with the utmost care and exactitude. These men carry the welfare of the community in their hands to a greater extent than they, or the great majority of people, can ever realize.

In brief, the effect of investigation upon the mind of anyone who undertakes it, will be to arouse the firm conviction that the time will come when it will have been proved that *M. domestica*, the common house-fly, can carry, and, in all probability, has carried, every pathogenic bacterium known to science.

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(I wish to express my appreciation of the time and assistance which Prof. Beyer has given me in this work.)

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Chlorosis; Its Diagnosis and Treatment.

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This paper is written frankly not with the idea of presenting any new facts or theories upon the subject, but in the hope of provoking a discussion of known facts and of theories already advanced and especially of stimulating a live interest in therapeutic measures outside of the beaten path of the routine. In meetings such as these, it is worth while and beneficial to thresh over old matters, even when nothing is to be added to the sum of our knowledge—if for no other purpose than that of review, in order that we may judge, in the light of experience, what is of value among the things set forth in our text-books, and what is to be rejected and cast out.

The clinical entity we call chlorosis must be differentiated on the one hand from the simple secondary anemias, from progressive pernicious anemia on the other. From the latter it is set off not only by its relatively benign character, as contrasted with the progressive and fatal course of the pernicious anemia, but also by the blood picture. The very great reduction of the number of red blood corpuscles, the deformity and variety in size of these cells, together with the presence of numerous nucleated erythrocytes, large and small, and particularly the high color index, make a blood picture which contrasts sharply with that of the typical chlorosis, namely, moderate reduction of the number of erythrocytes, a reduction of the hemoglobin out of proportion thereto, thus yielding a low color index, comparatively little deformity and inequality of corpuscles (poikilocytosis and anisocytosis) and few nucleated red cells. From the ordinary simple secondary anemia, chlorosis is distinguished not so much, as we shall see, by characteristic blood findings, as by the consideration of other clinical features. Indeed, chlorosis is set down as a

simple anemia, occurring with reduction of both hemoglobin and of the number of erythrocytes, usually with the reduction of hemoglobin in greater proportion than that of the erythrocytes, this anemia occurring without other known etiologic factor during the period of development and usually, if not exclusively, in the female sex. The qualifying phrase "without known etiologic factor" is the saving one which separates chlorosis from the other simple, mild anemia. Yet the term should not be a wastebasket into which are cast all cases of anemia of obscure origin. It should be reserved for that syndrome of symptoms which characterizes the peculiar anemia of the period of development, for which the term was originally intended and to which it has been fairly consistently applied.

The type of the disease is represented by a young girl (from 15 to 20), with pallid features, greenish complexion, the mucous membranes pale-salmon instead of rosy-vermilion, but the general nutrition probably not at all disturbed; her ankles, it may be, swell upon standing; she develops dyspnea upon slight exertion; her appetite is lost or perverted; her digestion disturbed by heartburn and discomfort; her bowels constipated. From this type there are, of course, deviations in each of several directions, and in the consideration of these cases not conforming to this type, lies the difficulty of diagnosis.

The matter of sex, that is whether chlorosis can occur in the male sex, is a question that involves the whole definition of the disease and brings up for consideration the theories of its causation. For the acceptance of some of these theories, as we shall see, bars out altogether the possibility of chlorosis in the male, as they are based upon some of the functions peculiar to women.

The classical theory of Virchow, that chlorosis is due to a congenital condition, namely, a hyperplasia of the arterial system—an under-size, as it were, of these vessels—does not meet with general acceptance today. In spite of the reports of Virchow and his disciples of the finding of this condition in the bodies of individuals who, during life, had suffered from chlorosis, we must be impressed by the fact that chlorosis, after all, is a curable condition—a condition that remits and intermits—a fact that contradicts flatly any idea that it is due to a systemic defect.

Forcheimer has advanced the theory that chlorosis is due to absorption of toxic albuminous material from the intestinal tract and he bases his treatment therefore upon intestinal elimination (purgation) and intestinal antisepsis.

Others (Hösslin) have contended that anemia is due to repeated small unperceived losses of blood from the intestinal mucous membrane. This claim has not been substantiated, although it is easily within the reasonable limits of indisputable proof.

Another School (Meinert) has advocated the idea that the disease is a neurosis, analogous, therefore, to hysteria, that the psychical phenomena are not to be explained by the anemia but rather that the anemia is to be explained on the basis of improper or lacking nervous control of the blood-making apparatus, of the apparatus presiding over digestion and absorption, as well as of the general vascular system.

Auto-intoxication at the time of menses and in some way connected with that function, has been the explanation of others (Charrin) and, finally, Von Noorden holds that the disease is bound up with one of those mysterious somethings that we have called internal secretions. It is his idea that the disease is brought about by the faulty production of the proper internal secretion on the part of the ovaries, or possibly the rest of the sexual apparatus of the female. Sahli says, in this connection: "The greater frequency of chlorosis in women must be associated with the peculiarities of the female sex. Apparently disturbances in the generative organs inhibit the stimuli which affect the blood-forming organs, upon which is dependent the normal blood-formation of the female. The conception that blood-formation is intimately connected with the female sexual organs has much in its favor, as it is reasonable to assume that the female body, which loses blood during menstruation, a process peculiar to the sex, must have an adaptive mechanism in the genitalia which serves to stimulate blood-formation."

Nothing definite, conclusive or even approachingly convincing, has been brought out in favor of any of these theories, and each of us is free to accept that one that may appeal to him most. It is certainly to be desired and it would be worth while to investi-

gate anew a long series of these cases. Certainly until we shall be in a position to know something more of the mysterious internal secretions, we cannot judge of the value of this idea. The most we can say from a clinical point of view is that because of the preponderating and perhaps exclusive occurrence of the disease in females, such an etiology is extremely probable. But, then, we must say as much for the plausibility of the intestinal absorption theory, since so many of those patients suffer from constipation and so many of them are relieved by treatment based upon this idea, and for the neurosis theory, which seems to have equally as much clinical evidence in its favor. But, whatever view we may be inclined to as to the general etiological consideration, all authorities agree in ascribing importance in the causation of the disease to the following facts: Sex, age, heredity, unfavorable hygienic conditions. Some, as I have said, deny absolutely the probability of occurrence of chlorosis in the male; others report cases which they consider such, but all agree as to the overwhelming preponderance of the female sex.

Chlorosis usually occurs between the ages of twelve and twenty. It is eminently a disease connected in some way with the developmental period. I have seen it several times in young women between twenty-five and thirty, that is to say, not always the primary attack, but, at any rate, relapses, and in one instance, now under observation, the age is thirty-two, although this is said to be rather uncommon.

As to hygienic conditions, we must not gain the idea that chlorosis is a respecter of class or condition, for we find the disease as prevalent, or perhaps more prevalent, among the daughters of the well-to-do than among those of the poor. To what extent improper food and improper nourishment are a factor in the etiologies of true chlorosis, must remain problematical. It is probable that they may be the determining cause in some instances, but I should incline to the view that if a true chlorosis exist there is probably another factor in the background. I have in some cases been impressed by the importance of some of the causes enumerated by Grawitz, the hurry of life, the over-intense existence of the modern woman, the psychical over-exaltation, and, in some instances, nostalgia (home-sickness.) I am con-

vinced that these psychical factors in the case of women of the leisure class are even more important than the bad hygiene and malnutrition in the cases of the poor. It has been repeatedly pointed out, too, in Europe, that servant girls coming robust and healthy from the farm-houses, became markedly chlorotic after a few weeks of city life with the unaccustomed duties, the hard work and home-longings.

Certainly now that we come to the consideration of diagnosis, these points of age, sex, predisposition by heredity and predisposition by surroundings and habits of life will prove to be of the utmost value to us. Here we must remember the many things that may cause a secondary anemia, and we must search for them carefully and thoroughly in the previous history. Until and unless they are excluded, we have no right to make a diagnosis of chlorosis. For instance, we should never forget that secondary anemias are brought on by malaria, intestinal parasites, by prolonged lactation, by bad food.

These patients present themselves to us usually anemic and pale-looking, though this is not always the case. Sometimes, these girls and young women have rosy complexions much admired, and they are astounded when told that they are anemic. Very often, indeed, it usually happens that in spite of the rosy cheeks, the mucous membrane of the gums is pale, a very pale shrimp color. The patients complain they tire easily or are tired all the time; particularly in the morning they suffer so from lassitude they cannot perform their duties, but as the day goes on their energy returns, until by evening they are quite ready for any exertion—to dance until the wee sma' hours of the morning, if the opportunity presents itself; all without the slightest sense of fatigue. Or they will tell us of palpitation, of disturbed or perverted appetite, of poor digestion, of constipation and of various hysterical phenomena. They have sinking spells, the surface grows clammy, sweaty, spots fly before the eyes, they feel they are dying. Others have sudden attacks of choking, especially at meals, accompanied by a sense of impending suffocation. Still, others have spells of depression and weeping. These hysterical phenomena may occur at any time and the doctor is summoned in the greatest haste at any hour of the day or night; the patient is said to be in

the greatest danger. Especially after some excitement or worry, no matter how trivial the cause, or after undue exertion or nervous strain, are these attacks likely to come on.

Physical examination usually shows individuals of impaired nutrition. Very often, indeed, these patients are over-stout. Over the precordium there is often a hemic functional murmur and this is sometimes accompanied by venous murmurs at the sterno-clavicular joint and at the base of the neck, the so-called "nun's murmur." It is extremely important to differentiate here between the functional and the organic murmur, for herein lies a chance for false diagnosis. We may be dealing with an anemia secondary to an organic cardiac condition, and not with a functional cardiac condition secondary to an anemia. Consideration of the anamnesis, the character of the murmur, its transmission, the character of the second pulmonic sound, the blood finding, which should be that of a marked, distinct anemia, with reduction of the erythrocytes, whereas these latter are often increased in cases of endocarditis. We should be particularly careful in the physical examination to eliminate the possibility of an incipient tuberculosis. Gastropotosis is a frequent finding in chlorosis; indeed, by some it is ascribed as etiologically important. The spleen and liver are not enlarged.

Finally, the clinical laboratory must be brought to our aid. In appropriate cases, the sputum must be carefully and repeatedly examined for the tubercle bacillus, as there is no point where a false diagnosis is so likely to be made as between these two—incipient tuberculosis and chlorosis. The urine must be looked into, for we might have before us an anemia secondary to a nephritis. Very often it is also essential to examine the feces for evidences of intestinal parasites, such as the uncinaria, also for evidences of blood from gastric ulcer, or intestinal ulcer. For an accurate diagnosis, all these things as well as a complete examinations of the blood are essential. Determination of the per cent of hemoglobin, the number of red and white blood cells, examination of stained smears to determine the presence of nucleated red cells, the deformity and unequality of cells and to make an estimation of the relative proportion of the several varieties of leucocytes.

I have already briefly outlined the blood finding. I merely wish to emphasize the fact that there is no pathognomonic blood picture setting of chlorosis from the simple secondary anemia. There is nothing characteristic about the findings as to hemoglobins, erythrocytes or leucocytes (as to number and variety.) Nothnagel (Van Noorden), page 370, says, "Laache described milder cases of chlorosis in which the clinical phenomena of the disease were so distinctly marked that the diagnosis could not be doubted; yet the blood showed scarcely any deviations from the normal worth mentioning (either in respect to the number of red blood corpuscles or to the amount of hemoglobin)."

But that very failure to find a characteristic blood picture helps us to eliminate pernicious anemia and the leukemias, and to estimate at their true value other clinical data. Of especial importance in the blood work is, of course, the search for the plasmodia malariae, that we may be assured we are not dealing with a case of anemia secondary to that infection. Marked increase in the number of eosinophiles would lead us to suspect strongly the presence of an intestinal parasite as the cause of the anemia and make us examine the stools as indicated above.

The prognosis of chlorosis as far as life is concerned is good. The disease after intermissions and remissions tends to disappear after the age of thirty. With the remedying of wrong conditions and after even perfunctory administration of iron and arsenic some cases tend to improve promptly. But the majority do not, and it is for that majority that so much can be done that is usually not done.

No one will gainsay the value of iron and arsenic therapy in anemia. Arsenic is usually given in the form of arsenious acid, in doses of gr. 1/50 to gr. 1/30. Of all the various forms of iron, the Bland pills have received universal commendation. The numerous organic preparations presented to us from time to time have not, so far as I can discover, proven their worth beyond question, and undoubtedly the swing of the pendulum is back in the direction of the old and trusty inorganic preparations. These latter have undoubtedly the great drawback of frequently disturbing the digestion and increasing the heartburns from which the patient already suffers, on account of the hyperchloridia usually present.

Next in importance to these cardinal drugs are the bitter tonics, such as gentian, cinchona and nux vomica, upon which we rely often to restore the appetite. If we are to adopt Forcheimer's intestinal theory, laxatives and intestinal antiseptics take front rank in importance. Forcheimer recommends that the bowels be kept well open by even daily small doses of saline waters, like Hunyadi, Apenta, and the like, and he then prescribes salol in doses of five grains 3 times daily after meals. But whether we are ready to adopt this theory or not, it is of the utmost importance to see that the constipation is overcome. We can best do this by the regulation of the diet. We have usually to deal in the case with the atonic form of constipation and we therefore prescribe a diet rich on the side of vegetables and fruit and restricted on the side of those foods which yield a large amount of calories, with a minimum amount of residue. But in regulating the diet, in order to remedy the constipation, we must not forget to regulate it as to be of service in ameliorating the anemia. Milk deservedly stands high in the estimation of the therapeutists and the patient should be ordered to drink at least a pint and a half daily. Fresh, rare meats at least once daily should be taken. On the other hand, to be forbidden, are tea, coffee, alcohol, sweets, hot bread and cakes, and the like. The diet cannot be rigidly outlined, as it must be modified to fit each individual. For instance, for the obese chlorotic, we must order such a diet as will not increase, but rather decrease the weight while improving the hemoglobin contents of the blood. Poorly nourished girls must, on the other hand, have a diet rich in calories—plenty of cream and fat.

To return to the treatment of the constipation. We have sometimes to deal with the spastic form and not with the atonic and here the diet is just reversed, for we endeavor to give food which yields the minimum of refuse. Vegetables of the type of cabbage, for instance, and raw fruits are therefore to be eliminated. A consideration of the differential diagnosis of the two types of constipation would lead too far afield. In the atonic form, we can further assist to a cure by massage of the colon and often by faradism and by the administration of such drugs as cascara. In the spastic form, both of these measures are contraindicated, and we should resort rather to rest and to the use of

drugs like atropin—calculated to relax the spasmodic contraction of the intestinal musculature.

I have just spoken of rest. Of all measures on the treatment of anemia, this is perhaps the most important, at any rate, where the hemoglobin is markedly reduced. The old formula of plenty outdoor exercise for these cases has been flatly contradicted by later experience. Nature shows what the organism needs when she displays the warning signals of dyspnea and lassitude and depression. We see repeatedly the hemoglobin mount steadily after these patients have been put to bed and kept for ten days. Prolonged confinement to bed is not good, but certainly treatments of ten days or two weeks invariably show improvement.

After such cures, patients should be instructed for an indefinite period to obtain as much rest as possible. They should rise late—ten o'clock at the earliest—and in the afternoon they should be made to lie down again and should be advised to retire not later than 10 p. m.

Hydrotherapy, in its various forms, is of the utmost value. The idea of all of them is to stimulate the blood-forming organs and increase the general nutrition. Baruch (Hydrotherapy), for instance, says: "It is my constant practice to order for anemic patients one or more thorough diaphoretic (hot air) baths a week, followed by gradually reduced douches, for the purpose of overcoming the spastic contraction of the arteries and enhancing tissue change, and thus improving assimilation of albuminoids." The carbonated baths—which are today easily prepared in any home—are extremely valuable. Their well-known effect in dilating the skin capillaries and their favorable action upon the circulation, certainly carries out fully the idea advanced by Baruch. They are bracing and delightful to the patient and the results obtained from their use as indicated both by objective and subjective improvement of the patient and by the blood examination, are gratifying. Other procedures worthy of commendation are the cold pack and the cold rubs. Blood-letting has been suggested, with the idea that this would stimulate blood regeneration. I have no experience with this procedure, nor with the use of oxygen, which has also been recommended. (R. Lefèvre, *International Clinics*, 16th Series, vol. 1, p. 211).

Undoubtedly, change of climate and of surroundings work great good. The seashore and the mountains have been recommended, but this should be borne in mind: A place should be selected where the patient may, at the end of a rest of ten days or so, indulge in moderate exercise as walking, and where grades of the walks are not so steep as to cause great exertion. In other words, level places or gentle inclines along the sides of hills are to be selected. Preferably those resorts should be selected where the patient may have the benefit of properly conducted treatment, with baths and the like, and where she may drink some of the chalybeate and mild saline waters. Apparently much better results from both baths and drinking water cures are obtained where the patients are treated at such a resort than when they are directed to drink the same waters and take the same baths at home. This is probably due to some extent, at least, to the fact that the patient's daily routine down to the smallest minutiae, is much better and more easily regulated than it is in the home surroundings. It is in such resorts that continental Europe is far in advance of our country. Here our people do not take such rules seriously. They are in too great a hurry and, above all, they will not submit to be bossed and ordered around as they are by the cure-doctor abroad.

Finally, it goes without saying that all factors contributing as causes must be removed. Bad hygiene must be remedied. Tired society girls must be taken from their dissipations, young matrons worn by the cares of the household as well as the ceaseless demands and activities of modern day life, must be removed from the scenes of those worries and activities and be made to feel as care-free as possible, and so on through the whole list of contributory causes enumerated before. Special symptoms will often cause great concern, but the true treatment of them all is the constitutional one, aiming at the amelioration of the general condition.

DISCUSSION.

DR. A. J. PERKINS. He has gone over the symptomatology and differential diagnosis very thoroughly, but one of the symptoms to be looked for would be an examination for fibroids.

DR. SIMON. Grawitz believes chlorosis is a neurosis, resembling very closely hysteria. He believes the blood changes are but an expression among others of the physical manifestations of hysteria. Many of his cases are treated solely from the standpoint of hysteria. He believes, first of all, in the rest treatment. He puts his patients to bed and keeps them there for two or three weeks, over-feeds them and gives them massage and electricity, and in some instances without the use of iron or arsenic in any form he claims to have achieved perfectly satisfactory results from every standpoint in the treatment. I saw some of these cases that he claimed to have cured and followed them, and I must say they appeared better in every respect than those cases we ordinarily treat solely with iron and arsenic. I have been struck by the fact that in New Orleans we have comparatively little chlorosis, and I had thought that perhaps this was due to the comparatively warm climate, because recently the use of hot baths has been suggested in the treatment of chlorosis. The patient is given a real hot plunge for twenty minutes each day. The results claimed in the German magazines seem to be satisfactory.

The treatment of chlorosis should largely include physical measures with medicines merely as an aid.

DR. BRUNS. Dr. Thayer has stated to me that the diminution of the number of cases all over the north has been noted by all the physicians.

DR. LEMANN (in closing.) I regret that I did not get to the real point of my paper, which was to lay stress upon the non-medicinal treatment of the disease. the treatment by rest and physical methods, as suggested by Dr. Thayer's paper and by Dr. Simon. I am greatly impressed with the therapeutic value of hot baths and carbonic baths. These baths are not only stimulating, but by their action alone we are able to find a marked improvement in the hemoglobin. I was interested in the suggestion of Dr. Simon that chlorosis was found here so seldom on account of the hot climate and the consequent good action of the skin. I have been struck with the poor action of the skin of these patients who have the disease. They complain that they cannot sweat and they do not sweat.

Peripheral Nerve Injuries; their Prognosis and Treatment.

By DR. ROY M. VAN WART, New Orleans.

The peripheral nerves are formed by the processes of cells situated in the anterior horn of the spinal cord and in the ganglia of the posterior roots. These are held together by connective tissue, carrying at the same time blood vessels and lymphatics. The nerve fiber is formed of the central axis cylinder, a layer of homogeneous material known as the myelin sheath and an outer sheath consisting of rows of nucleated cells. The axis cylinder consists of fibrils known as neuro-fibrils held together by a homogeneous groundwork. This is always the process of some nerve cell. The myelin sheath appears on the motor nerves just before they pass from the spinal cord. It covers the sensory nerves throughout their course. It consists of a homogeneous substance covering the axis cylinder except at certain regular intervals where it is practically absent. At these points, known as nodes of Ranvier, the outer nucleated sheath comes in contact with the central fiber. The myelin shows numerous irregular striæ, known as the incisions of Lauterman. The outer nucleated sheath is a structureless membrane with oval nuclei situated one between each construction or node of Ranvier. These fibers are held together by lamellæ of connective tissue, the perineurium. This sends processes which split the nerve into small bundles, the epineurium and the individual fibers are held together by finer strands, the endoneurium. The two former carry the blood vessels and contain numerous fat cells. The lymphatics of the peripheral nerves are continuous with those of the spinal cord. The non-medullated fibres are found in the sympathetic system. They have no myelin sheath.

The processes of degeneration in an injured nerve were carefully studied by Waller.

When a nerve is divided the part distal to the point of division degenerates. The axis cylinder becomes irregular and beaded. The myelin of the myelin sheath undergoes changes and droplets staining with osmic acid takes its place. The nuclei of the sheath of Schwann proliferate. The nerve trunk becomes filled with round cells and if regeneration does not occur becomes slowly

converted into a fibrous tissue thread. At the point of division both ends retract; the peripheral end becomes pointed. The central degenerates upwards for some distance and later becomes converted into a bulbous connective tissue mass. The disintegrated material is rapidly absorbed. In the muscles the fibers lose their transverse striation and become smaller in size. Later their contents become wax-like, or granular, and if the nerve does not regenerate it is ultimately replaced by connective tissues.

In cases of slight injury, compression or contusion, these changes may only occur in a slight degree, but in cases of severe injury with or without loss of continuity, these phenomena occur. The process of repair of an injured nerve has been in recent years the subject of great controversy. The earlier observers held that repair always occurred from the central end, and that the fibers always grew downward, but recently the view of peripheral regeneration has been advanced. Without discussing the question, which is as yet by no means settled, the weight of evidence seems to be in favor of the former view. Recently Cajal, using his new neuro-fibril stain, has concluded that there is no evidence of a peripheral regeneration.

Bethe, also the originator of a neuro-fibril stain, is the principal supporter of the peripheral doctrine. (His new work is not as yet obtainable in this country.) The difference of opinion seems to be in the interpretation of the changes observed.

In a divided nerve after suture, or in an injured nerve, when there is no loss of continuity, the earliest regenerative changes occur in about three weeks. These consist in the downgrowth of the cut axis cylinder, from the proximal end. The neurilemma nuclei arrange themselves along these new fibers. Later the myelin sheath appears probably secreted by the neurilemma. In this connection it is important to note that only fibers possessing a neurilemma regenerate and section of the sensory root proximal to the ganglion, if not followed by regeneration beyond the point of entrance to the cord, where the neurilemma ceases. The time required for repair depends on the character of the injury and on its severity, and whether the nerve is sutured or not.

In compression cases recovery is rapid. In complete section

where the ends have been sutured regeneration is slow, being often incomplete after years. Where secondary suture has been performed the processes of repair are the same. There are as yet no means of determining when regeneration after secondary suture will occur and when it will not.

The symptoms resulting from nerve injury are very variable. They depend on the severity of the lesion and the nature of the nerve. Mixed nerves are most usually injured and motor symptoms nearly always result. These may vary from only a slight weakness to complete paralysis. The paralysis is always flaccid with loss of reflexes in the muscular regions involved. In severe cases atrophy preceded by electrical changes follows. Sensory changes are not so frequent as the paralysis. This is partly the result of the fact that by compression of a nerve motion is more early affected than sensation. Again the anastomoses of the sensory nerves seem to cause overlapping of the skin areas and the appearance of a smaller anesthetic area than would seem to be the case from the anatomical distribution. Still further, Head has shown that the area of skin supply and those of the deeper structures do not come from the same nerves. The principal sensory disturbance is anesthesia. This may be of both the deep and superficial parts, or of the superficial alone; in testing it is important to map out both independently as the skin loss is usually much greater than the loss of deep sensation. In certain cases of nerve injury hyperesthesia may occur, the Causalgia of Weir Mitchell. Pain and paresthetic sensations are not uncommon. Vasomotor disturbances may occur. The anesthetic part is at first warmer and later colder than the normal. The part may be white, red, or cyanosed. Edema is not uncommon, lack of perspiration in the affected area usually occurs. Trophic changes in the skin and nails are frequent. Slight injuries are slow to heal. The skin may crack and vesicles, or large blebs may occur without any apparent cause. Pressure may cause ulcers. Changes in the nails, such as brittleness, ridging and change in shape occur. Head has shown that slow growth is the result of fixation. The hair becomes brittle and falls out. The electrical changes are loss of faradic irritability with retention of galvanic. This may be at

first increased. Later in severe cases the positive pole may give a stronger response than the negative. (Reaction of Degeneration.) It usually takes ten days for these changes to occur completely. Muscular twitchings occasionally occur.

In considering the diagnosis one must exclude the muscular atrophy resulting from joint injuries and the ischemic muscular paralysis of Volkmann. The latter is the result of too tight bandaging. If the bandage is not removed swelling and pain result. The muscles soon shrink and become as hard as stone and a flexion contracture occurs. Sensation is also lost. Active and passive movement is prevented and is accompanied by great pain. The electrical reactions are lost!

Care must be taken in cases of multiple bone or joint injuries as the diagnosis of nerve injury is here often difficult. The course depends on the nature and severity of the injury. In a certain group of cases termed toxico-traumatic by Oppenheim, we find a slight injury in an alcoholic, in lead intoxication, or after infectious diseases giving rise to a paralysis. In these cases recovery is usually prompt; in one case of paralysis of the musculo-spiral, in 10 days, in a case of ulnar paralysis, 7 weeks; both were in alcoholics.

In cases of slight injury followed by paresthesia and numbness, recovery may occur in a few days; in severe cases many factors enter. The most important are the degree of injury; complete section; partial section or severe injury without loss of continuity; the nature of the wound and the time of suture. In most cases open wounds are complicated by suppuration. We have no means of determining whether the nerve is completely severed, except by exploration. In cases where there is no open wound the expectant treatment is to be advised.

In cases of injuries to a plexus the prospect of recovery is much less than in more peripheral disturbances. According to Bruns, about twenty-five per cent recover; of 17, personally observed cases of this character, only six showed much improvement. In these cases we are probably dealing with injuries to the spinal roots. In cases of complete section, even when suture has been prompt, recovery is slow. In Head's cases 273 to 605 days

elapsed from the time of suture until voluntary motion returned. The reaction to the interrupted current were detected at the same time. In cases of secondary suture the time elapsing was from 370 to 802 days. In no case was there anything like the remarkable recovery noted by some observers. In regard to the return of sensation in the studies of Head, who allowed his cutaneous sensory nerves to be cut and immediately sutured, the return was slow; in seven weeks sensation to pain began to appear, but at the end of two years the parts had not completely regained their sensibility.

The treatment of peripheral nerve injuries offers an excellent opportunity to train the patience and perseverance of both patient and physician. The treatment must, in many cases, extend over months and possibly years. Cases of no matter how long standing may be susceptible of improvement, and while a complete restoration many not be possible many have been observed that have been benefited.

All cases of complete section with open wounds should be sutured at once. Where a gap exists it may be bridged by catgut, decalcified bone or silk, or by nerve flaps. Nerves from animals, when introduced, are completely absorbed.

Secondary suture should be attempted as long as electrical reaction can be obtained in the muscles. In long standing cases where the muscles have been replaced by fibrous tissue little can be hoped for.

In cases where no positive opinion can be expressed as to the probability of complete section expectant treatment for from two to three months is advisable. In cases of compression from callous, foreign bodies, tumors, operative interference should be undertaken at once.

In all cases medical measures must be persistently carried out. Of these massage is the most important. It should be applied only to the muscles and is a means of preserving their nutrition until the re-establishment of the nerve supply. It should be given with caution and care should be taken not to injure anesthetic skin. In a case recently seen, several abscesses over an anesthetic tibia were caused by too vigorous massage.

The use of electricity, particularly the constant current, is of value. This may be used in two ways, to promote restoration of

the nerve and to prevent muscular atrophy. In the former case the positive pole may be placed over painful nerve and the negative be on a different part. A current of from four to six milliamperes should be used. In the latter instance the negative pole may be rubbed gently over the paralyzed muscles, a current of sufficient strength being used to cause muscular contraction. Where the reaction to the interrupted currents are retained this current may be used. This treatment should be kept up three times weekly, for months, if necessary. Hydrotherapeutic measures may be of value. Of these lukewarm local baths, or packs, for 30 to 40 minutes may be useful. Mud baths, hydro-electric and carbon dioxide baths have been employed with beneficial results. Drugs are not of much value. Only two are at all extensively used, strychnin in doses of one-fortieth of a grain, three times daily, and arsenic given in small doses, with intermission, over a long period of time.

Passive movement to the paralyzed parts are of great value. As soon as movement returns the patient should be encouraged to use the affected part as much as possible.

Alcohol should be prohibited where it has been a factor, and lead poisoning should receive its appropriate treatment.

Trophic disturbance should be carefully guarded against. Should they occur they are to be treated antiseptically and carefully protected.

In cases where no improvement results muscle and nerve transplantation may be employed. More recently root transplantation has been advised.

DISCUSSION.

DR. DUPAQUIER: I have a case of a woman showing some paralysis, being a traumatic neurosis. She has been treated by galvanism in St. Louis and is now here. Dr. Van Wart takes up the prognosis, and I would like his opinion in this case.

DR. C. J. GREMILLION: I have a case under observation of the prognosis of which I am very uncertain. The man was shot six times in the left axilla. He had something in his hand at the time, which dropped immediately, and he had a partial paralysis of the flexor, and anesthesia of all the fingers and the palm of the hand.

He had acute pain in the fingers, which kept up for four weeks. The anesthesia then improved, but the motor paralysis is still partial.

A Practical View of Bacteriology for the Physician.

By DR. JOSEPH D. WEIS, New Orleans, La.

It is with great temerity that I come before you to speak, as I am about to speak today, for I have, unfortunately, nothing original, nothing that is truly new to tell you, but I hope, by taking a few minutes of your time, to ask of you to stop and consider an abstruse fact or two, that I may be able not only to interest you in a working science, but also to bring its poetical, as well as practical, side to your daily thoughts and work.

Bacteriology: When I put this title to these thoughts, I mean not simply the science or study of bacteria, but wish to include that of Pathology, its better half or, so-to-speak, its other self; for there is no reasonable separation possible between bacteriology and pathology. No amount of artificial division of the sciences should be considered as explanatory for a subdivision of these two essentials, these two positive factors, these two truths, in the world of medicine.

I say these two essentials, positive factors, truths. Surely, amidst the myriad of speculation, theories and therapeutic eclecticism, amidst the weary mass of uncertainties of medieval knowledge, facts as we *see* them under the microscope stand aloft shining and glimmering in the blinding, brilliant light of truth. Like the Sphinx and the pyramids of Egypt, in the weary waste of sand, that have stood for ages, wrapt in impenetrable mystery in spite of endless speculation as to whence they came, they remain with us as facts in the world. So, but not exactly alike, with this positive science of the cause and condition of disease. Koch's bacillus, the plasmodia malarie are pyramids in the weary desert, whose sands were called by many and wondrous names; the sands of scrofula, of plaudism, and of kindred errors, but, unlike the Sphinx, we know *why* they stand, we know what these are: no man knows what the meaning of the Sphinx may be.

Bacteriology, the science of true etiology (not without reason do I say *true* etiology, for we have had many false etiologies, and still many speculative, problematical ones) may be likened to the *Inner Beauty* of Maeterlinck. We have it with us always; we must only stop and consider it in all its perfect beauty of truth.

Those of you, perhaps, who have not done microscopical work, never can have felt the thrill of pleasure, of triumph almost, that the worker experiences when he finds a tubercle bacillus in the urine, a plasmodium in the blood, a spirochete. These are the truths, these are the facts that flash upon us amidst a mass of negative results, that cheer us, that give a sensation which I can only liken in its essential estheticism to that wonderful inner beauty which the great Belgian philosopher propounds, and which dwells within us all, even the most humble, even the most wretched and despairing. For I want to impress fully that negative results in laboratory work, even in the daily examinations required by us now, for practical reasons, negative results are a weary wretchedness.

Please allow me to stop and make a plea for the negative report. The much maligned, the poor, scoffed-at, negative report.

What I want you to realize is that a negative report will require ten times the amount of serious hard work that, for an instance, a positive find of a tubercle bacillus in the sputum will require, and alas, means *nothing clinically*, I emphasize *nothing clinically*. Think of it when you get your next negative finding. Not only is it possible that the specimen is not a true sputum, but simply a sample of saliva, but also that your patient may expectorate true sputa from a tuberculous lung that, at the time, is throwing off no bacilli into the excretions. A negative sputum then may come from a true tuberculosis of the lung! It is right that we should realize this and realize the disagreeable, useless, hard work imposed when a saliva or a blood saturated with quinin is given to the microscopist for examination. He will conscientiously spend hours upon this work and come forth weary and sick, doubting, for you will have told him, perhaps, you are morally positive of this or that condition, but he cannot give you the fact, the truth. Don't scoff and go on doing the same thing. Realize the value, or non-value, of the negative examination, whether or not the fault lie in us, correct any possible hindrance. Do not ask for the examination of a

quinin-saturated blood. Know and realize that a patient may well be consumptive, as we say, and yet not expectorate the organism. It is much easier and much more encouraging, stimulating work for the microscopist to send you a positive result, be sure of that.

What has bacteriology done in the past; what does it do in the present, and what will it do in the future? It ill behooves me to tell you in detail the results obtained by the heroes of the past. All the heroes of medicine are not to be found within the laboratory, but how numerous are the great names that are associated with the microscope. Pasteur, who opened the world of bacteriology to practical therapy; Koch, whose name is synonymous with the knowledge of tuberculosis; Hansen, with that of leprosy, and others innumerable. These men stand as objects of hero-worship throughout the medical world. We know what diphtheria, leprosy, tetanus, typhoid are; many more we know positively, and more, we know not what they are, but we do know, oh wonder! how to really treat and cure, perhaps. This is a mighty stride, these are a mighty series of truths, pyramids high above the blood-letting and the cutting-for-the-stone of the last century.

What of the present? Shiga, in Japan, Gruber and Von Behrings, in Germany, Metchnikoff, Roux and Calmette, in France, Wright, in England; Flexner, Welsch, Reed, the sacrificed, our own Wright, all these men, and many others, are advancing, raising us, their contemporaries, with them; but alone they are not doing these great things, and could not do so alone. Active *as well* as passive assistance is given by their brothers in practice; aid must be given, material must be given, and not alone a willingness but also an ambitious striving to be the first to give the required aid. Away then with all material hindrance and antagonistic thoughts. Let us try not to waste the precious time of these workers in the hives of, and for the future, as well as of and for the present.

Daily does the laboratory worker give us the only truths we find, daily do we draw the sigh of relief—a positive Widal's Reaction—we can dispense with the differential diagnosis, no miliary tuberculosis here. Daily does the presence or absence of a leucocytosis point the way for the surgeon's knife or rule out the presence of this or that condition which we know cannot exist with an excess of leucocytes in circulation. At the present, in this very active

hour, these workers of the laboratory are dealing with a wonderful fact, limitless in its possibilities as to its ultimate results in therapeutics, the Opsonic Index. The opsonic index may lead us we know not wither in therapeutics. And what is it we each of us strive most earnestly for, one goal, one object is common to us all, to treat and *cure* our sick. To be able to really cure actually, by what we do with our hands and head, to feel that we did this thing, that is the Ultima Thüle, the non-plus of each man's striving. We already are able to *help*, to keep our patient, under proper conditions, so nature can do her work, but we do not *cure* many diseases ourselves—we help, we do not do all the work. Here, with the possibility of actually curing disease by what we do with our hands, here in this present moment all over the civilized world men are working to put this ne-plus-ultra at our disposal. Let us stop and consider this well, let us help each other work together to the same end. No scoffing, no mumbling together after the laboratory door is closed on the worker left to his fearsome task. Don't criticise what, perhaps, we do not understand, but help: waste no time in talking about the thing; do something to help. Give your patients over to this or that specializer, who may apply methods which may (even if they do not necessarily help the individual) further the general knowledge and advance us up to the laboratory fact; up to the actual truth.

What of the future? It needs no gift of prophesy, which is mere fantasy, to say, without hardihood, that the future advances of therapeutics must come from pathology in the broadest sense of the term. All steps toward advancement of medical knowledge, all seventh waves in the tide of knowledge toward a higher plane of medical truths, must lead from the laboratory.

Who can say what bacteriology will do for the future? As the opsonic index may lead to we know not what Utopia, so other burning facts may blaze forth, if not for us now present, for those who are to come. May we not liken ourselves to the bees, the workers in the hive, not the drones, who one day are all mercilessly slaughtered, but to the army of "sterile virgins," the workers of the hive. She builds the comb and daily visits the flowers, bringing back with each visit a treasure to be stowed away as honey in the comb, not for herself, she shall never drink the honey she makes,

but, wonderful to say, one day the swarm will be formed and all these workers who have incessantly visited the flowers, to bring from them to the hive the pollens and sweets to be stowed and left, will leave all its treasures behind for the future generations to feed upon. May not we do like? Workers we are, let us stow away our pollen and grains of truth, although, perchance, we may never see their maturity, though we too may never drink the honey we are making, still honey will remain as made and upon it the future generations may live and profit, just so much the more for our having been.

About a year ago, while reading Dubois' book on *Psychic Treatment*, a thought occurred to me, whether a faint feeble glimmer or spark, had not shown forth from out the darkest period of human history, from out the fourteenth century, to glow as another pyramid of truth in this twentieth century of ours. After Europe had been devastated by the "great mortality" for over three years, there appeared amidst the nerve-racked remnants of Europe's population a fearful epidemic more hideous than the Black Death itself had been. The "Dancing Mania," so-called, began and spread, perhaps, solely through suggestion, over all the western world. This hideous laughing, shouting and dancing mania attacked all alike, men, women and children, when one of the great in medicine arose to combat its progress: Paracelsus, the father of modern medicine appears in history. He it was who disclaimed the Devil as an active agent in disease; who removed the wretched neurotics from under the stupid ministrations of the superstitious priesthood, and changed the whole world of therapeutics from that of exorcisms and flagelations of the supposed Evil Spirit, to an almost rational physiological basis.

He divided this dancing mania, this St. John's and St. Vitus' dance, into three forms of one disease, and treated them, not by prayer at the altars of St. John and St. Vitus, but by a wonderful reasonable method with equally wonderful results. And here is the spark that glimmers from out that darkest period of the Middle Ages. Those whom he had classified as overwrought in nerves were to be carefully treated, of which treatment more later. Those who were obviously malingerers, merely dancing because they had no other method of living, he locked up as miscreants; and a third

class, to which our present idea of chorea belongs, he left to get well by the result of time. But the treatment of the first class, this is the wonderful fact that leaves the impression of what this man, Paracelsus, was. He caused a waxen image of each one of these unfortunates to be made, and by earnest thought and constant endeavor, he urged each patient to transfer all his wild desires and impulses of dancing, laughing and screaming, into the image, whereupon, when these overwrought, hysterical patients had labored up to a point to what, to us, must obviously have been perfect suggestion, or physic influence, he caused the waxen images to be melted away in flames and immersed the patient, now free of all his maniacal propensities, into cold water.

May this not be considered as a honeycomb of truth, the pollen of physic treatment, the honey of hydro-therapy, stowed up by this worker bee that, six hundred and fifty years later, was to nourish and bring forth another worker bee, who, in his turn, fills his comb with a precious honey? And so a great Swiss physician gives us a notable book on physic Therapy; but this is not bacteriology, and, as Kipling says, "But that is another story."

No doubt, you are saying yes, this is all very fine, but why tell us what we all know so well; we all have thought and talked over this before. Remember, I said I had nothing original, nothing new, no truth to put forth; but I had a paper to write and rather than rehash facts that you all know, I have dared to rehash thoughts. It never does any harm, I believe, to reiterate a good thought; perhaps I may have suggested a view-point, I hope so.

I know I have strayed far from my subject and beg your indulgence. After all, what I had to say may serve its purpose in spite of its apparent, though not actual, I believe, irrelevancy to title—"De truth am de light and de light will shine."

Orleans Parish Medical Society Proceedings.

President, DR. JOHN J. ARCHINARD.

Secretary, DR. AMEDEV GRANGER.

141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. AMEDEV GRANGER, Chairman.

DR. HOMER J. DUPUY and DR. E. O. TRAHAN.

MEETING OF AUGUST 24, 1907.

DR. SIDNEY K. SIMON reported the following

Cases of Achylia Gastrica.

T. T., white, age forty-five, a native of New Orleans; occupation, housework; married, with three healthy children; menopause three years ago.

Family History—Mother died at 63 of apoplexy. Father died at 65. Patient is the only one in her family with stomach trouble.

Personal History—The patient first consulted me for her stomach on June 29, 1905. At that time she gave the following history: She had been a dyspeptic for twelve years and her trouble had been more or less constant during that time with few periods of remission. She suffered with severe colic like pains in the epigastrium, coming on at irregular intervals, mostly after eating, but sometimes even on an empty stomach. Occasionally a vomiting spell followed the cramp, but she rarely noticed in the vomitus food particles from the meal preceding the last one. To her knowledge there was never any blood in the vomitus. She also experienced a disagreeable sensation of heaviness and fullness after her meals, even at times after the smallest quantities. There was no heartburn, but occasionally a regurgitation of hot fluid to her throat. The appetite had been for the most part poor and in consequence she had been losing very gradually in weight during these years. The bowels were at all times normal, with one well-formed movement a day. She has never complained of a bad taste in the mouth.

The physical examination was generally negative. The abdomen was found relaxed, but with no potosis. There was some tenderness over the epigastric region, without, however, any special localization.

Test breakfast, July 1st, 1905, two hours after ingestion. No contents expressed. Wash water returned stained with blood and containing some clots and a small amount of mucus. The presence of blood gave a suspicion of ulcer and in consequence a soft, limited diet was ordered.

The stomach was washed empty in the morning. No clots were visible, but the wash water contained occult blood.

The patient reported general improvement. Still, with some trepidation, I ordered a test breakfast four days later. The result was surprising. Only 40 c.c. of the contents could be obtained after one hour. The chymification was poor. There was considerable mucus, but no visible blood. Occult blood test negative. No HCl. was found after careful test. No lactic acid. Microscopically, a large number of leucocytes. A tentative diagnosis of chronic atrophic gastritis was now made. The only etiological factor to account for this condition was the fact that for the past fifteen years, the patient had been practically without teeth, though she had supplied this deficiency during the previous year. At no time during her life, had she been a user of alcohol. Her diet was carefully regulated, and in the way of medication she was given large doses of HCl. Codein was used for the pains. She soon showed marked improvement and did not come to my notice again until November, 1905. The pains had again returned with some vomiting. She had discontinued her medicine in the meantime. A test breakfast at this time again showed an absence of HCl. After some weeks of treatment she found relief, and on January 19, 1906, discharged herself as cured.

I did not have occasion to examine her again until January 14 of this year, after an interval of about a year. She returned with the same old complaints, only the pains at this time were extraordinarily severe. This attack followed a period of grave indiscretion in her diet, occasioned by the festivities of Christmas week. I was able to palpate her pylorus at this visit and found it was very sen-

sitive to pressure. Morphin was necessary for the pains and in addition silver nitrate was used for several weeks. A low diet with olive oil before meals was ordered. I did not care to risk tubing on this occasion, as I feared, from the severity of the pains, possibly an ulcer had formed on the pylorus on the basis of the chronic gastritis. She recovered slowly from this attack. The pylorus spasm I found hard to control and finally ordered anesthesin in five grain powders. The result was instantaneous; the pains vanished as if by magic.

Since that time (February, 1907) she reports normal digestion. She is careful as to overloading her stomach, but eats very much what she pleases now, with impunity. Her condition today, as she will tell you, is that of a person with perfectly normal digestion.

Yesterday morning, August 23, her stomach contents, after a test breakfast (3-4 hours after ingestion), showed HCl. present. No lactic acid; no occult blood; some stomach mucus; microscopically nothing abnormal.

Mrs. A. H., white, age 39, widow, cook by occupation and a resident of this city. Consulted me first on August 16, last, for a stomach trouble she has had for the past four years.

Her family history shows a hereditary tendency to tuberculosis. Her father is still living at 63, but the mother died of phthisis pulmonalis at 25 years, and a single brother of the same disease at the age of 20. She herself has shown no evidence of tuberculosis in any way. Had never had serious spell of sickness in her life, and before the onset of the stomach disturbance, four years ago, had always been in the very best of health. She was married at the age of 17, but some years later became divorced. She has had no children, but had a miscarriage at 18 years. Her domestic affairs have occasioned her much worry, and to this she attributes the onset of her digestive disturbance. She suffers principally with nausea and vomiting, coming on mostly around menstruation. So far as she knows, she has had no gynecological disease. At varied and irregular intervals she experiences sharp pains in the epigastrium, usually immediately after eating. The sensation is one of a knot or cramp and is relieved promptly with vomiting. The pain may come on also on an empty stomach, and the vomitus which follows is then

a clear green fluid. She has never vomited blood. Her experience has taught her that the character of food she eats has little influence in the pain. She claims she feels at times a burning sensation in the epigastrium, but never has sour eructations or waterheart.

The appetite is very capricious. Bowels are often constipated. She is inclined to be very nervous and excitable and has frequent attacks of so called weakness. On physical examination, I was able to make out a loud anemic murmur at the base of the heart. The lungs showed no evidence of any abnormality. On palpating the abdomen, the right kidney was found descended, second position, otherwise the abdominal examination was negative.

On August 18, one hour after the test breakfast, the stomach was found absolutely empty. This gave immediately a suspicion of achylia.

On August 21, another test breakfast was given and removed half hour after ingestion. The quantity was still small, showing active hypermotility of the stomach. The contents contained very little liquid, and had a distinctly bready odor. There was some stomach mucus. HCl. was negative. T.A.=8. Erythrodextrin absent. No pepsin. Six drops of the filtrate reduced Fehling's solution. No occult blood. No bile, other than a rather large amount of indican, the urine showed no abnormalities. The blood examination revealed only 70% of hemoglobin, and the evidence of a secondary anemia is otherwise marked.

The diagnosis of achylia gastrica was now established, and the patient put on a HCl. therapy with suitable diet.

C. J. B., age 43, a warehouseman by occupation, and a native of this city, was referred to me for treatment on July 21, 1907.

He gave the following history—He had always been a vigorous and healthy man up to about two and a half years ago, when he began to be troubled with a persistent dyspeptic and bowel disturbance. Outside of the more trivial childhood diseases, he remembers to have been sick seriously but once, an attack of typhoid fever at the age of 13, from which he recovered completely. Three and a half years ago he suffered a severe attack of abdominal pain, necessitating his remaining in bed a week, which at the time was diagnosed as appendicitis. There has been no recurrence. It is well

to remark here that the patient had at no time, in previous years, been troubled with any stomach or bowel disturbance of any nature. His present trouble came on very insidiously, when, without any apparent cause, he began to notice that his bowels were becoming more fluid with a tendency to move several times a day, where before he had had normal defecation. This persisting in spite of household remedies, he consulted his physician, who ordered the usual drugs for diarrhea, without, however, complete success in checking it. Shortly after the onset of the diarrhea, he also began to experience sharp pains in the epigastrium, accompanied by vomiting, all of which was apparently independent of the character of the food he ate. He describes his pain as a "clutch" or sudden spasm in the epigastric region, followed immediately by a violent vomiting spell, which usually brings instant relief. These attacks would come on at very irregular periods of the day, but there was scarcely a day that the patient did not experience one such attack. Immediately after the attack, he could sit down and eat a hearty meal with impunity.

During all this time the patient did not seem to suffer any marked change in his nutrition or general appearance. It is only within the last six months that he claims to have lost about twenty pounds in weight. This he attributes to the fact that during this time he had been kept upon a very low diet. His appetite lately had also been poor.

Apart from the sudden attacks of pain, he has experienced no other stomach disturbance. No burning, no nausea, no pressure sensation. In his many attacks of vomiting he has never noticed blood. Does not remember to have ever been jaundiced. Has never passed any bloody urine.

The family history is good. Father died at 65 of paralysis. Mother living and healthy at 62. Four sisters and brothers living and in good health. Other than himself, there is no dyspepsia in his family, nor does he know of any other family taint. The patient's habits are most excellent. He does not use alcohol in any form. Has not smoked in two years, and before then only moderately. He denies venereal infection.

At the time when I first saw him, some four weeks ago, I made

a very careful physical examination and found generally normal conditions. The patient, as you see, presents the appearance of a man in the enjoyment of average good health. There is no cachexia or anemia, nor does he appear in any way emaciated. The nervous system does not exhibit any abnormalities, outside of a general increase in the reflexes.

Heart and lungs are normal. The *abdomen* presents a normal contour with firm abdominal pressure. There is no pulsation of the abdominal aorta visible. No tenderness in any region on deep palpation. No tumor palpable. *Liver*, normal in size, not palpable. *Spleen*, not palpable.

On July 22, the patient received his first Ewald test breakfast. A very small amount of contents was removed with aspiration. There was no HCl. present.

On July 25, I again gave him a test breakfast, but this time removed it half hour after ingestion. I was able to aspirate 100 c.c. of a thick bready constituency. The chymification was very poor. A small amount of throat mucus was present. Odor bready.

After filtration, I found: HCl.=0. Total acidity, 6. Erythro-dextrin, absent. Sugar (3 drops reduced Fehling's Solution). No lactic acid present. No pepsin. No rennet. No occult blood.

Urine—Clear, acid, specific gravity 1025; no albumen. Heavy ring of indican. Microscopic, negative.

From the stomach findings and general symptoms, a diagnosis of achylia gastrica was made, and the patient was put upon 60 drops of dilute HCl. t. i. d. along with a careful regulation of his diet.

The patient reported great improvement already on July 31, four days after beginning treatment.

On August 2, he vomited for the first time again a small amount of fluid, but without any pain.

On August 12, after an indiscretion in diet (hard rice) he vomited the offending particles without the clutch which usually preceded such an attack. Since then his stomach has been in an apparent normal condition. He has experienced no more pain. His bowels move regularly, once a day and are well formed. The appetite is good and the patient says he is beginning to feel like he has a new lease on life.

On August 22, the stomach contents, after test breakfast (35 minutes after ingestion) showed: Quantity 80 c.c.; HCl=0; T.A.=10. Chymification poor. No mucus. No pepsin. No rennet. No lactic acid. Otherwise as before.

Miss K. D., white, age 40, a native of New Orleans and a tobacco classer by occupation, was referred to me July 15, 1907, with a history of a stomach disease of one year standing. During this time she had been treated variously, even with stomach washings, but without apparent relief.

Her stomach symptoms consist of a sensation of soreness in the epigastrium, with a burning which seems to rise to the throat like a flame, as the patient described it. There is constantly a large amount of gas in her abdomen, which rolls around and makes the patient very uncomfortable.

Diarrhea has been a constant symptom since the onset of her trouble. She has had as many as seven movements during the day, of a very fluid nature, but without any accompanying abdominal cramps or tenesmus. She has never noticed any mucus or blood in the stool. At times, she experiences sharp cramp-like pains in the epigastrium, coming on usually after eating and lasting only a few minutes at a time. There has never been any nausea or vomiting. Headaches have been an additional distressing feature of the patient's trouble. The pain involves the entire head and usually makes its appearance around three o'clock in the afternoons. The appetite has constantly been good. Sleep is undisturbed. The patient also complains bitterly of a persistent, sour, drawing taste in the mouth as if she had eaten unripe persimmons.

The physical examination at the time of her first visit revealed practically normal conditions. There was some slight tenderness in the epigastrium, but not localized in any one spot. The right kidney was barely palpable on deep inspiration. The patient presented a somewhat anemic appearance, and made the impression of a nervous tension, which she could scarcely control. The reflexes were all highly exaggerated.

On July 19, her first test breakfast was given. After careful aspiration only 5 c.c. of contents were expressed. This had an unusual tenacious and mucoid appearance. HCl. negative.

July 29, another test breakfast was given and removed half hour after taking. 50 c.c. of a thick, poorly chymified mass was expressed. On filtration HCl. was found negative. T.A.=5. No occult blood, pepsin or bile was found in the filtrate.

The blood was found to be free from plasmodia malariae. Hemoglobin 70%. Urine negative.

A diagnosis of achylia gastrica, complicated with secondary anemia, was now made and the HCl. therapy and dietetic regime instituted. A Blaud pill was also ordered before meals.

On August 5, she reported already general improvement. The diarrhea had been checked almost instantly, and the pains in the stomach had also ceased.

On August 16, the patient again reported progressive improvement, and on August 24 she informs me that the headaches have likewise about passed away. There still remains some general nervousness with occasionally a sensation of weakness. She has gained two pounds in weight since the beginning of her treatment.

DISCUSSION.

DR. STORCK: The subject of achylia gastrica is one of considerable importance, great care being required in arriving at a diagnosis. Carcinoma and chronic gastritis must be excluded. A deficiency or absence of the secretory activity of the stomach, is often observed in neurasthenic, and, especially, in anemic subjects. While no causative anatomical change is noticeable in these case, it is doubtful if a purely functional disturbance is responsible for the condition.

The second case that Dr. Simon has presented does not appear to me to be one of achylia gastrica. I do not think that one or two examinations of the stomach contents is sufficient to base a diagnosis on. H. Leo, of Bonn, has suggested that before a diagnosis be arrived at, repeated examinations be made, and finally that a previous irritation of the mucous membrane by the introduction of a salt solution, be practiced and the stomach contents then tested. I have found the use of the intra-gastric electrode to answer a similar purpose. By this means I was enabled several times to prove that the secretory function was not entirely wanting.

As regards drug therapy, the use of hydrochloric acid in large doses is the best. Pure pepsin given in combination with the acid at meal time often proves of considerable value. Hydrochloric acid does not agree well with some patients. When it does not, the corresponding dose of dilute phosphoric acid must be used in its stead.

In regard to the good effect of dilute hydrochloric acid in treating the diarrhea, sometimes incident to achylia gastrica, I can attest its value. While on the subject of the use of dilute hydrochloric acid in diarrhea (pardon a slight digression), I wish to recall to you the value of this agent in lenteric diarrhea in children. In answer to Dr. Dempsey's question, I will mention the treatment of two children. To one child, aged eight years, ten drops of the dilute acid, in water, were given three times daily after meals; to the other child, aged two, five drops of the dilute acid, in water, were given three times daily, soon after meals.

Dilute hydrochloric acid can be given in cases where lactic acid was formerly prescribed.

DR. HOWARD D. KING reported

A Case of Metol Poisoning or Intoxication.

Metol is a solution used by photographers for the development of pictures and is usually employed when rapid development is the object. Patient, a young man about nineteen years of age or thereabouts, consulted me for pains in the shoulder and arm and, even, the fingers. Diagnosis of rheumatism made and treatment instituted accordingly. Treatment proved of no avail. Pains continued for a fortnight, when patient went to the country on his holiday. Remained in the country for fifteen days and during that period pains entirely disappeared. Returned to the city and once more he pursued his usual vocation, that of photographer, when the pain in the shoulder, arm and fingers re-appeared. Pain became so intense that it was difficult that the patient could get out of bed. In an hour or two, and with vigorous rubbing of the affected parts, patient could use the arm and fingers. Anti-syphilitic treatment resorted to and same proved valueless. My object in reporting this case is to secure some definite mode of treatment. Patient says he objects to giving up the trade of photography, as he will be left without a live-

lihood. How can this patient be treated and a cure effected and be still able to pursue his vocation. Upon investigation I have found four other photographers similarly afflicted. Do not know the composition of metol.

DISCUSSION.

DR. G. FARRAR PATTON: I have dabbled considerably in photography and can state that the susceptibility to poisoning by metol is now recognized as an idiosyncrasy. Those who are subject to it must simply avoid exposing themselves. Metol is one of the modern developers and is very generally used, being what is termed a "hustler," working quickly and giving fine results. In combination with pyrogallic acid, now known as pyrogallol, it is much used by professional photographers, and only a few experience any injurious effects. Those who do have no option but to let it alone. (Added later. Metol is "Mono-methyl Para-amidometakresol." Its formula is $C_8 H_{11} NO$.)

MEETING OF SEPTEMBER 14, 1907.

DR. E. DENEGRE MARTIN read a paper entitled

Fractures.

I have here the skiagraphs of a few interesting cases of fracture, which will show clearly conditions which might have been avoided with more experience on the part of the practitioner and a confirmation of the conditions by the fluoroscope. So far, New Orleans has been practically free from malpractice suits, but it does not mean that in the course of time these suits, which are so prevalent in the East, might not be instituted here, and I think, for this reason, we should be more careful with the treatment of these cases.

The first that I have to show you is that of a colored man, whose hand was caught between the drawheads while trying to couple cars. As you will see from this skiagraph, all of the metacarpal bones were fractured. This occurred some six months ago. At the time of injury the soft tissues were sutured and healed, as I understand, primarily. No regard, however, was paid to the apposition of the fractured bones. The result is that the hand is now perfectly use-

less and cost the railroad the sum of \$250 as a compromise. It is easy to see what should have been done in this case. First, the wound should have been thoroughly cleansed, the fractured ends properly apposed and, if necessary, held in place with sutures, the soft tissues then brought together with interrupted sutures, and drains applied at proper intervals. The shortening of the hand in this case should have been in itself an evidence that the bones were not in apposition.

CASE NO. 2.—Here I show you the skiagraph of a fracture of the humerus, two inches above the condyles, which you will see is overlapping, showing the marked deformity with a shortening of two inches in the length of the humerus. The history of this case is, that the man fell, and striking his arm, fractured it above the condyle. Six weeks later, when the arm was supposed to have been united and the splint removed, he slipped down the stairs and refractured it. We find in this case a transverse fracture with an apparent overlapping of one inch or more, and absolutely no bony-union—a practically useless arm, another case for which the railroad will have to pay for permanent injury. In this case there is little excuse for such a result. A comparison of the two sides would have shown at once a shortening much too great for an oblique fracture; whereas, digital examination should have elicited the fact that the fracture was overlapping. Furthermore, had any doubt existed in the mind of the attending physician, it would have been an easy matter to have had a skiagraph taken.

CASE NO. 3: The third case is one of especial interest, and the result could not be better. This gentleman, while attempting to catch a car, slipped and struck his arm on the rail just below the elbow, sustaining a fracture, as you can see by the faint line, about one-half inch in front of the coronoid process. It was impossible, on account of the action of both the triceps and biceps, to hold these fragments in apposition. Every effort was made to do so, but with the use of the fluoroscope it was easily seen that no position would maintain the proper approximation. I determined, therefore, to wire the fragments. This was done thirty-six hours after the injury. I cut down upon the bone, exposing the fractured ends, which were drilled and transfixed by a piece of iron wire, which is

shown in the skiagraph. It is possibly true that an absorbable ligature would have done as well here, but where the trauma is so great there is always danger of the breaking down of the tissues, which means infection of the absorbable suture and a bad result. I am glad to say that in this case we had primary union and the patient was at his desk in six weeks.

The fourth case shows that of a green stick fracture of the radius; one skiagraph taken before setting of bone and the other the day patient was discharged. This is a case of Dr. Parham's and, as you see, is a beautiful result. I present this case not only to show the result obtained, but also to call your attention to the misleading conditions so often established by a skiagraph. A lateral view shows apparently a perfect result, but an anteroposterior view shows a marked deformity. The reason for this is due to the fact that the bone, which is fractured only two-thirds of its diameter, has a clean cut transverse fracture, and the skiagraph would give the impression that it was a complete fracture in perfect apposition. Were this, however, an oblique fracture, the line would be more distinct and would indicate to an experienced eye that there might be a deformity, but to one inexperienced it would give the impression of a perfect result. I have shown you these cases merely to call your attention to some practical points, which I trust will be of value to those of you who have little experience in the treatment of such cases, and I trust the discussion will bring out other practical points which the limited time allowed me prevents me from touching upon.

DISCUSSION.

DR. ALLEN: The discussion by Dr. Martin is extremely interesting and practical. I think skiagraphs, except in recent fractures, are frequently misleading unless we have right angular views, that is, one antero-posterior, the other lateral, for the fragments are frequently in the same parallel axis to each other but badly overlapping. In a recent fracture the shadow at the point of overlapping will show, but in united fractures this shadow is obscured by the callous. The right angle view here will show the deformity.

Regarding the use of wire or any other non-absorbable material

to fix the fractured ends, I think a mistake. When such material is needed kangaroo tendon or stout cat gut should be used.

The foreign body, if non-absorbable as wire or such other devices as the Parkhill clamp, almost invariably causes osteo-paresis or necrosis at the points of contact, and the fragments thus made weaker or impaired by the supporting material. This may not occur for some time, but this should not mislead the operator into false hopes. The above is Prof. Matas' teaching, who cites many cases where subsequent operation became necessary for the removal of wire or other similar material.

DR. LARUE: I resort to hot water and massage, excellent adjuncts to prevent atrophy and vaso-motor paresis. The great mistake made is to allow the fracture remain too long immobilized. As to the question of anesthesia that is a good point, but we know the Charity Hospital receives some cases where the patient is suffering from such extreme shock that it is inadvisable to administer an anesthetic. Something has been said about transverse fractures. I do not think there is any such thing as an absolute transverse fracture; they are mostly oblique. Dr. Martin says, in fractures of the leg, put the foot at right angles to the leg. That is correct, for if the foot is extended the tendo Achillis, through the constant contraction of the gastrocnemius will cause patient to walk on anterior plank or surface. Now Dr. Martin shows me this X-ray picture as a transverse fracture. I myself find that it is more oblique than transverse. I would like to see a pathological specimen of an absolute transverse fracture of the humerus.

DR. S. W. STAFFORD: The treatment of fractures resolves itself into perfect reduction and then the maintaining of the fragment of the bone in the correct position. In the case Dr. Martin shows of a fractured humerus, the fragments, to my mind, were never properly reduced, or if they were, slipped after the splints were applied. We find that fractures of the humerus are really the hardest fractures to treat. Dr. Martin did not say anything about fractures of the femur. In the last two years I have made a number of observations on fractures of this bone and think that the treatment that I use now is the best in most cases. I put the patient to bed, the foot of which is elevated about eighteen inches. The injured

leg is put between sandbags, and with adhesive strips running up to the point of fracture I put on heavy weight to make extension—usually between 27 and 30 pounds in a male adult, and keep this up for ten days. They usually complain of some pain and have to be given relief by the use of morphia. At the end of ten days the callus has formed sufficiently to keep the bone in apposition and I apply a plaster cast and allow the patient to get about on crutches. I think the point Dr. Martin brought out in regard to the use of the fluoroscope is quite a good one. I usually set the fracture, and after ten days have a skiagraph taken. An interesting case that I have now at the Hospital is a man who fell seven flights of stairs at the Grunewald Annex, sustaining a fracture of both femurs and base of skull. We thought he would soon be dead, and so did not manipulate the fragments but splinted the legs and sent him to the ward. He is doing very nicely, though the results are not all we wish for. In this case, of course, we are going to get some limp. The case that Dr. Martin shows of a fracture of all the bones of the hand is interesting to me, particularly, as we often get these cases, with the external wound sutured. The wound in the skin is sutured and no attention is paid to the injury beneath. I had, a few days ago, a case where a man was brought in with a badly lacerated perineum, which had been sutured by the doctor in attendance. I wanted to see whether the urethra was ruptured or not, and had the sutures removed, when I found it was. I found a fracture of the pelvis also. No attention was paid to the ruptured urethra or the fractured pelvis, but the skin wound was nicely approximated.

DR. JACOBY: Thought we left fractures in splints too long before applying massage to the muscles, and determining whether reduction had been satisfactory. Had seen patients sent to his clinic whose splints had not been removed in weeks or who, in case of a plaster cast, had been advised to call at the clinic six weeks after original dressing had been applied. Advised massage of the muscles within two weeks after fracture of the humerus to be carried out at least three times a week. Thought that the part of the plaster cast in fractures of the femur below the knee could be removed in two weeks. Considered the skiagraph indispensable in fractures and suggested its aid in every case of fractures.

DR. MARTIN (in closing): Dr. Allen expresses the opinion that absorbable ligatures are preferable in the suturing of bone to wire. I am very glad that this point was touched upon by Dr. Allen, for many have the same idea, and are under the impression that wire always gives trouble. He urges two objections: First, that it is a foreign body; and, second, that silver wire is apt to break. In the first place I have long since given up the use of silver wire because its tensile strength is rarely sufficient to hold bones in position where there is any muscular traction of the fragments, or where the manipulation of the bones is apt to cause a break before the permanent splint is applied. I have used, for several years, annealed iron wire, which is very much stronger, pliable and less apt to give trouble. With the use of this wire, fragments can be brought closer together and held much more firmly, which will assure a better result and little trouble follows. If the wire can be held in position so as not to be moved either by the action of the muscles or the movement of the fragments before ossification takes place, it will give no trouble, but will become thoroughly encysted in the tissues and will remain permanently. It is only in such cases where the wire holds the fragments loosely in position, and where the movement during the process of ossification takes place, or an infection follows, that wire will ever give any trouble. In the case which I have shown, the wire has been in position for more than six months, and I could report at least twenty other cases in which it has given absolutely no trouble. No fixed rule for the use of either absorbable ligatures or wire should be adhered to, but it should be used in cases where the one or the other is most suitable. It stands to reason that in cases where an absorbable ligature will do the work as thoroughly as wire that it should always be given the preference.

Dr. Granger calls attention to the fact that an X-ray expert can easily tell, from an examination of a skiagraph, whether a deformity exists or not. I would ask Dr. Granger to make a further examination of the skiagraph of the last case, and point out to me by what means he could discover that a green stick fracture existed. Dr. Stafford believes, and I agree with him, that it is not an easy matter to get a perfect result in certain fractures of

the femur, and suggests that an anesthetic should be used in nearly all cases. This is true, and especially is it true with children. For the past eighteen months I have found that in all cases, except in children, where it was simply for the purpose of an examination of the fragments, that ethyl chloride answers the purpose admirably.

DR. CARROLL W. ALLEN reported a case of

Gangrene of Foot Following La Grippe.

Octave Benoit, admitted to Hospital April 28, 1907, act. 63, farmer; uses tobacco freely, alcoholics rarely. Never remembers being sick before. Slight general arterio-sclerosis. Urinalysis and other examinations negative.

February 11, 1907, was seized by a severe attack of la grippe, which lasted two weeks, was very ill, temperature high, coughed incessantly and suffered severely; at the end of this time was awakened one night by feeling his left foot heavy and dead.

Examination showed the foot to be swollen and the toes cold and stiff, but with no pain. From this time his chest improved rapidly, the cough, temperature and pains stopping; the change was so abrupt that the patient describes the condition as going from his chest to his foot.

The toes, where they were ischemic, rapidly became darkened as gangrene set in, the condition progressed until it involved all the toes except the fifth and extended to the middle of the metatarsals on the dorsum, where a line of demarcation was established.

Operation.—May 2; a modified Lisfranc through the heads of the metatarsals was done. The wound healed well and he left shortly for home; returning in about two months with necrosis of the head of one of the metatarsal bones, which was removed by Dr. W. T. Richards.

REMARKS.—Post-febrile gangrene has been recorded in nearly all acute infectious diseases, notably typhoid fever, also in smallpox, scarlet fever, diphtheria, erysipelas and puerperal fever; whooping cough and measles also claim a few cases. Among the diseases rarely seen with us: typhus, cholera and bubonic plague, peripheral gangrene also occurs. In these cases, when gangrene occurs, it is most likely to happen with the subsidence of the fever. The abrupt change reported by the patient is probably more apparent than real.

The condition is due to thrombi caused by the bacteria and their toxins circulating in the blood, and may occasionally, though rarely be due to emboli. Among contributory causes may be named physical debility of the patient with poor food and unhygienic surroundings and pre-existing arterial disease.

DR. CARROLL W. ALLEN reported

A Case of Chyluria.

Aug. Asement, aet 48, born and raised in Louisiana, plantation laborer. Had whooping cough in infancy; when a boy, fell from a horse, falling on his buttocks, hurting himself severely; he suffered from the injury for about six months; typhoid fever (10 years ago), also occasional attacks of malaria.

About fifteen years ago, when apparently in perfect health, was alarmed to see his urine milky white; it continued this way for about two months, occasionally it would clot in his bladder and would be passed in lumps or strings, causing him much straining and vesical distress; there was no other disturbance connected with the condition, and except for worry his health remained good and he continued at his work. This condition would recur about once a year, always during the months of October and November, and last about two months; sometimes he would have a lighter and shorter attack during other seasons, but he has never missed the autumnal attack.

Careful examination of the patient fails to reveal anything of interest in relation to this condition. He is in the hospital for compound fracture of the leg. Examination of the chylous urine collected at various times shows it to be of a whitish color, ranging in shade from that of a milk and water mixture to that of pure milk, sometimes having a muddy yellow cast. S. G. varying from 1014 to 1018, reaction neutral to slightly acid. Upon standing no change was seen to occur, even after several days, except that it became ammoniacal unless protected by the addition of antiseptics. Several clots which he passed were also examined; they had the appearance and consistency of lumps or strings of softened macaroni.

The chylous urine was carefully examined microscopically, no

corpuscles or other bodies could be seen, even under the 1/12 oil immersion lens; all that could be seen was a hazy whiteness like a distant cloud. A specimen was submitted to Dr. O. L. Pothier, who made a similar examination with like result, also testing it for fat with ether, which would dissolve out a large part of the whiteness, but not all, the supernascent ethereal solution becoming yellow, showing the presence of fat.

REMARKS. Chyluria is of two kinds, parasitic and non-parasitic. The parasitic form occurring in tropical countries where infection occurs with the *filaria sanguinis hominis*, the parasite causing occlusion of one of the lymphatic or lacteal passages, causing a damming up with rupture into one of the urinary organs.

The non-parasitic form, such as the case I report, is of doubtful pathology, occurring sometimes with pregnancy, and after abdominal injuries, and must be due as in the parasitic form, to lymphatic or lacteal obstruction, with similar rupture.

In the case under discussion it is possible that the injury sustained in falling from a horse may have been responsible for the condition, although it did not develop for some years afterwards. Its periodicity in this case is a unique feature, the attacks rarely occurring except during the months of October and November; this is unexplainable.

The character of the chylous fluid was peculiar, it usually forms a coagulum on standing a few minutes, and the globules of fat are of such a size as to be easily seen with even a low power lens; in this case no coagulation occurred except the few clots passed from the bladder and the corpuscles were of ultra-microscopical fineness.

The location of the lymphatic rupture could probably have been determined by cystoscopic examination, using an ureteral catheter if needed, but the patient's fractured limb did not permit of any unnecessary examinations. As to prognosis, this is good, as far as life is concerned, but bad for cure, the condition generally persisting for many years.

Surgical interference is not indicated; the point of lymphatic rupture could possibly be located, but if closed, would probably rupture intra-abdominally, converting the case from chyluria into chylous ascites, a more serious condition.

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The Trade of Medicine.

For a long time it has been the practice of a certain large portion of the civilized world to associate the humanitarian professions of medicine and the ministry. It has been actually the rule of the physician to consider the minister, of no matter what faith, entitled to the privileges of a respected calling and, at all times, the surgeon and the general practitioner have granted services gratis to the preacher, whether he has been Jew or Gentile. This has seemed to be an evolutionary process, for, in none too ancient history, the priest was the dispenser of the panacea. If sacred history be true, Moses himself was no mean physician, and both the Talmud and the Koran teem with rules applied to the sanitary side of the individual, household and race.

It is refreshing, even if somewhat startling, to find one leader in a religious sect who sees the spot of gangrene in the medical fold. From his pulpit in the tabernacle, the Reverend Joseph Silverman, Rabbi, recently, in New York, anathematized the medical profession so: "It is not a profession; it is a trade that the doctors ply to-day. It is not the practitioner of a profession, who, with his calling to heal from on high, comes into a household and demands his fee before he will apply the knife to the cancer, the anesthetic or the healing lotion to the wound. It is a trade, I say, that is plied. And such practise ought to be condemned from every pulpit, every rostrum in the land. The government ought to step in and prevent them. It is not the art of healing, I reiterate, that is practised; it is a trade."

It would be, no doubt, becoming to analyze the basis of the reverend gentleman's belief; to, in turn, deliver our own tirade against those ministers of philosophic and sectarian faith who de-

rive from the practise of their sacred calling emoluments at the thought of which some ninety odd percent of the medical profession would wonder and not without envy.

It is seemly and timely, we believe, however, to express a real and frank opinion regarding the accusation, if you will.

It is estimated that the average practitioner of medicine and surgery in these United States receives for one year's work the sum total of \$800.00. It is fair to presume that such an average must be struck among the doles received by some forlorn country fellow workers and the city automobilian who limits his practice to those who pay in fees for which a check must be drawn. And yet, if comparisons are permitted, there are those of the ministerial persuasions who make no nod of refusal when a persuasive offer of a multiplied salary is presented to them, even though a duty fulfilled in a smaller atmosphere might stand in the way.

It is a libel on the man in any profession to accuse him of venality when he does his duty and his work. It is as rare to find a physician who refuses a humanitarian call as it is to find a minister of any creed declining a call to the dying or to those in misfortune.

There is, however, above all, a question involved which the thinking medical profession must meet. The very history of the commercial side of medicine has established the general belief in the mind of the laity that the doctor pursues his calling almost entirely on the grounds of giving relief to his fellow man. Because of this it is always the doctor who suffers most when the budget of expenses of the average household is arranged. The medical man is usually the last to be paid and, no matter how urgently he may be needed in the time of illness, the bill, in most cases, is paid with reluctance and, not at all infrequently, with an attempt at discounting, not the services, but the fees.

It is actually time that the medical profession, for its own good, should make business of its calling, for, when medicine is practised on business principles, the services rendered are more highly appreciated and the bill is more promptly paid. In this, as in ordinary trade, the man who is paid most is usually valued most, and the man in any trade who demands punctuality is usu-

ally more respected than the man who is dilatory, either in his practise or in his pay.

The history of the individual experience of every man who has ever practised medicine carries a long list of patients who have been cozeners and if, here and there, one man who practises medicine has stood out for a protection against these, it is so much to his credit.

So, after all, the cry of an extraordinarily well paid city preacher against the trade plied by an underpaid profession may do some good, and we trust that the lesson of his preachment may take root and blossom both ways.

The International Congress of Tuberculosis.

Owing to the great importance of the International Congress on Tuberculosis, which will be held in Washington, D. C., on September 21 to October 12, 1908, we make this early reference to the same and give it more prominence than merely as to a news item. Owing to our large colored population, whose manner of living and whose natural lack of resistance, both, make them victims in large numbers and a menace to the rest of the population, our Southern country is perhaps more largely interested in the question of tuberculosis than any other, hence we believe it useful to call the attention of the Southern profession early to this congress in order that they may be prepared to do both their share of work therein and lend their presence thereto.

The National Association for the Study and Prevention of Tuberculosis invited the International Congress on Tuberculosis to meet in Washington, and has been entrusted with the organization of the congress. It has created a special committee on this congress. The committee has enlisted the interest of the Federal government and seven of the governmental departments have signified their intention to participate. These are the departments of State, of the Treasury, of War, of the Navy, of the Interior, of Agriculture and of Commerce and Labor. The governors of the states of the Union have been notified and most of them have taken official action in favor of the congress.

The congress will be divided into seven sections, as follows: Pathology and bacteriology; clinical study and therapy of tuberculosis, sanatoria, hospitals and dispensaries; surgery and orthopedics, tuberculosis in children; etiology, prevention and treatment; hygienic, social, industrial and economic aspects of tuberculosis; state and municipal control of tuberculosis; and tuberculosis in animals and its relations to man.

The section work of the congress will be done from September 28 to October 3, and during that work there will be two general meetings. During the entire three weeks, from September 21 to October 12, a tuberculosis exhibition will be open and a course of special lectures and clinics by distinguished men will be in progress.

The committee has decided to award testimonials to especially meritorious exhibits, in the form of medals, diplomas or money prizes.

The papers announced in the official program will be printed in advance, and will be distributed on the day of their presentation. They will be printed in German, French, Spanish and English. The proceedings of the congress will be carefully edited and published within three months after adjournment.

The distinguished medalist, Mr. V. T. Brenner, has been commissioned to design a commemorative medal which will be used as a badge of membership and for the awards to exhibitors.

There are two classes of members; active members, who pay a fee of \$5.00 and receive a full set of transactions besides the ordinary privileges of membership, and the associate members, who pay a fee of \$2.00 but who do not receive the transactions nor vote in the congress.

National committees have been named from 46 different countries exclusive of the United States, for which state committees have been named. For Louisiana the following will constitute the State Committee: Miss Jean M. Gordon, Dr. C. H. Irion, Dr. Q. Kohnke, Dr. R. Matas and Miss Eleonor McMain.

Communication.

Diphtheria Antitoxin.

Colomb P. O., La., Oct. 2, 1907.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL,
NEW ORLEANS, LA

GENTLEMEN—There seems still to be, among certain members of the medical profession, a lingering doubt, as to the efficiency of antitoxin, in the treatment of diphtheria. I must confess that it was somewhat of a moot question, in my mind, until a personal experience taught me better, and served to emphasize its wonderful antidotal effects. The following cases occurred in my own family, and were treated under the skilful supervision of Dr. Homer Dupuy.

On July 14, 1907, one of my girls, aged five years, was taken suddenly ill with high fever and sore throat. Examination, the following day, showed a follicular exudate on both tonsils. The case was regarded as one of tonsillitis—particularly as it followed a wetting. The high temp. subsided in forty-eight hours, and the child seemed better. She continued ailing, however, with slight fever, and with increasing difficulty of swallowing, and resisted any attempt to inspect her throat. I thought she was suffering from a peri-tonsillar abscess with mild sepsis.

On July 26, she was examined by Dr. Dupuy, who pronounced the case one of diphtheria. The membrane involved the pharynx, both tonsils, naso-pharynx, the soft palate on the right side, extending to the hard palate. The temperature was slightly elevated and pulse slow, 68 to 74. She was given 4000 units antitoxin at 10 p. m.; same 5 a. m., July 27; same 3 p. m., July 28; same 8 a. m., July 29. There was no perceptible spread of the membrane, after the first injection; it began to recede on the second day, and was no longer apparent on August 1. There was gradual improvement, and no more antitoxin was given. During convalescence this child ran the gamut of sequelæ. The pulse rate went from 68 to 136; she had a syncopal attack, which came on during sleep. There was right unilateral palatal paralysis, and also paralysis of the ocular muscles, as shown by axial deviation. The child complained, also, for

some time, of double vision. (Did the slow pulse indicate irritation of the pneumogastric? Did the rapid pulse indicate a paralysis of the same nerve? Was it peripheral or local?)

A boy, aged ten, was taken, July 21, with fever at 105 and sore throat. As he had been wet also, he was treated for acute tonsillitis, and all his symptoms subsided in forty-eight hours. He remained well until July 28, when his temperature began to rise; his throat was congested, swollen and painful; he complained of malaise, but there was no exudate present. (The two boys had been quarantined from the house since the 26th inst.). 2000 units antitoxin were given at 8 p. m., July 28, and 3000 more July 29, at 9 a. m. He did not develop any exudate. His temperature remained slightly elevated for forty-eight hours, and his throat injected and painful, when he convalesced, and has remained well and without complications.

A girl, aged thirteen, who had also been out in the rain, was taken, on July 23, with symptoms of coryza, running at the nose, nasal voice, fever to 103, and complained of her throat, which showed a discrete follicular exudate. Her acute symptoms subsided in forty-eight hours, but she remained with evening fever and the coryza, and exudate increased. On July 26 this tonsillar exudate could be removed from the follicles, without bleeding or leaving even a raw surface. There were, however, two small patches of diphtheritic membrane on the pharynx and a post-nasal examination showed exudate in the post-nasal region. She was given 1000 units 10 a. m., July 27, same 4 p. m., same 8 p. m. (my supply had run out), 4000 units July 29, 9 a. m. There was no increase of the membrane after the first dose of antitoxin, and by the fifth day her throat was clear. She had a daily evening rise of temperature until August 1, when she expelled a piece of bloody membrane from the nares, and spat another large piece from the post-nasal region. August 2 she seemed convalescent, and has continued without complications.

A girl, aged nine, was taken July 25, with fever at 104 and sore throat. She had also been in the rain. The following morning there was a distinct grayish exudate on the right tonsil. The fever was reduced with phenacetin, as in the other cases, and did not rise

afterwards to any great degree. She was given antitoxin, 1000 units, July 27, 10 a. m.; same 4 p. m.; same, July 28, 3 p. m. (all I had); 4000 units, July 29, 8 a. m. There was no spread of exudate, beyond the tonsil first affected. This patch was the size of a thumbnail, not discrete and grayish. The tonsil was injected, very much swollen, and the membrane extended deeply into the crypts. About the fifth day after beginning the antitoxin, the last shred of membrane had come away, the child was convalescent and has remained well.

A boy, aged eight, who had been quarantined on the night of July 26, was taken with fever on the night of the 27th with sore throat. When he reported on the morning of the 28th his temperature was 103, throat red, swollen and painful, with a thin streak of grayish exudate on the right tonsil. He was put into the hospital, and given my last dose of antitoxin at 10 a. m., 500 units. At 4 p. m., same day, he was given 2000 units, and 4000 more at 9 a. m., July 29. I watched this little streak of membrane carefully. It never increased perceptibly and was gone on the third day after the initial dose of antitoxin. No complications.

A girl, aged three and one-half years, began ailing about July 22. She was simply fretful, had slight evening fever, and never complained of her throat. At times she hardly appeared ill. Examination of her throat, July 26, showed a distinct diphtheritic exudate on both tonsils. She was given 1000 units, July 27, 10 a. m.; 1000, 4 p. m.; 4000, July 28, 6 p. m.; 4000, July 29, 9 a. m. There appeared to be considerable reaction from the two first doses of antitoxin, the temperature rose and remained high for thirty-six hours. This may have been a coincidence, or due to the local traumatism, which was considerable. There was a drop of the temperature in forty-eight hours, and a gradual disappearance of the exudate, which was gone on the fourth day, and she has been well since that time.

REMARKS: I will not discuss the probable source of infection, the question of double infection, or try to explain the failure to make a correct diagnosis, in the first case. I wish simply to call attention to the marvelous results of the antitoxin treatment, in cases at all stages—from one twelve days old to one just beginning,

44000 units being given, in twenty-two injections, without an untoward symptom or a single infection. I observed no depression, after a 4000 unit dose, in the youngest child, or following any injection in the first and worst case. The local treatment was almost nil, a chlorin water as a wash and gargle, and a few applications of peroxid, before using the antitoxin. In one case, there was a local erythema, at the site of injection, accompanied by intense itching. This was relieved by an alcoholic solution of menthol. The question of treatment resolves itself into two propositions only: (1)—The longer and more intense the infection, the more antitoxin; (2)—As the injections are painful, give 4000 units at a time, every six to twelve hours, until the exudate is gone. I might add a third: Have no fear of giving too much.

TECHNIC: The site of injection was washed with absorbent cotton, dipped in an alcoholic solution of carbolic acid (10 minims to the ounce). An ethyl chlorid spray was used just before inserting the needle, and the serum was injected slowly. A small piece of adhesive plaster was used to cover the puncture.

Yours, Truly.

B. A. Colomb, M. D.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In Charge of DR. F. A. LARUE, Assisted by DR. P. L. THIBAUT, New Orleans.

GUNSHOT WOUND OF LUNG; COMPLETE PERFORATION; HEMOTHORAX; THORACOTOMY; SUTURING; RECOVERY—Mr. Ombredanne (*Revue de Chirurgie*, August 10, 1907) reports to the Société de Chirurgie the urgent case of a young soldier, suffering from a self-inflicted gunshot wound of the precordia.

The ball entered about an inch to the outside of the left nipple; no exit wound present. The patient showed signs of severe internal hemorrhage. Auscultation revealed a marked hemothorax and a churning sound. The direction of the bullet precluded any cardiac injury.

Ombredanne, in less than an hour after the accident, cut down rapidly, making a thoracic flap with external hinge, the bullet wound corresponding to the center of the flap. On opening the pleura there immediately escaped a quantity of dark blood clots. The lung was projecting and on its anterior surface was found a wound about an inch in size. Ombredanne compressed the injured tissue with his fingers, above which a Kocher forceps was placed, and then a No. 2 catgut ligature.

After cleaning the pleura and elevating the lung he noticed a persistent bloody flow from the exit wound on its posterior surface. Similar treatment, complete hemostasis resulting. Assured that no hematoma had formed in the lung and that the pericardium was intact, the doctor replaced the flap, draining through the sixth intercostal space. Immediate results were good. The drain was removed in forty-eight hours. Signs of pleural effusion shortly appearing with fever, a posterior thoracotomy was made, liberating a large quantity of turbid fluid. Recovery finally took place.

LARUE.

INCISED WOUND OF THE LIVER—Mr. Gaujet (*Revue de Chirurgie*, August 10, 1907) presented to the Lyons Surgical Society a man who had received quite a large wound of the abdomen, with severe bleeding and extrusion of a mass of small gut.

The blood came from the mesocolon, several vessels being ligated, from the liver and from an extensive cut of the gall bladder.

The cystic artery was first controlled; the liver had to be packed, both sutures and ligatures yielding. Recovery. A cholangia, lasting only three days, appeared a month after the operation.

Mr. Gangolphe believes that often times it is wiser to tampon against hepatic hemorrhage. In a rapidly growing cancer of the liver, an incision made with the thermo-cautery determined a profuse flow of blood, which was stopped by a ligature en masse, including the abdominal wall and liver; gauze meshes had also been inserted in the wound so that in reality tamponing, combined with forcible suture, was resorted to.

LARUE.

PRIMARY TUMOR OF THE PNEUMOGASTRIC; RESECTION OF NERVE; RECOVERY.—Mr. Venot (*Revue de Chirurgie*, August 10, 1907), relates to the Société de Chirurgie the case of a man, aet.

thirty-two years, who, whilst hunting, was shot in the antero-lateral region of the neck. There gradually appeared, at the site of injury, a tumor, accompanied by huskiness of the voice from paralysis of the left vocal cord, pains in the corresponding ear and cardiac disturbances, such as palpitations and pricking heart pains, increased by any fatigue or effort.

Venot saw during the operation that the tumor was encapsulated and continuous above and below with the pneumogastric.

Traction on the tumor caused a violent and alarming glottic spasm, which ceased only after section of the pneumogastric, above and below the tumor.

The severed ends of the nerve were too separated to enable restoration of the trunk. The patient recovered and all pathological phenomena disappeared, the altered voice alone persisting.

Histological examination of tumor revealed a fibro-sarcoma. This case seems to be unique, as Venot has been able to collect but one somewhat similar. Venot lays stress on the importance of his case, emphasizing once more the greater gravity of pneumogastric irritation as compared to its section.

He witnessed a death from exciting the pneumogastric during an extirpation of the cervical sympathetic.

LARUE.

Department of Obstetrics and Gynecology.

In Charge of DR. P. MICHINARD and DR. C. J. MILLER, New Orleans

ABDOMINAL PREGNANCY. John Edgerton Cannady, M. D., in the *New York Medical Journal*, after discussing the history of the lesion, so far as surgical knowledge of it is concerned, states that only during the last fifty years has its treatment been worthy of consideration. Lawson Tait has been the pathfinder in this as in some other subjects. The statistics of frequency vary widely according to the counts of different observers. About 8% of all cases of extra-uterine pregnancy are said to be abdominal in character.

The symptoms are divided into those common to all varieties, and those peculiar to individual varieties. Of the first class are the reflex symptoms which belong to all normal pregnancies. The nausea or vomiting are commonly severe and begin usually early in pregnancy. Two symptoms specifically point to extrauterine gestation. They are the bloody discharge, and the abdominal pains which are as a rule colicky and sharp; they start from the region of the tumor and radiate downwards and outwards. These pains may begin about the first of the second month and last through pregnancy. The acme of their severity is about the menstrual period, and there may be an intermission of entire freedom from them between the periods. During these attacks of pain the abdomen may be swollen and tender to the touch. The pulse is accelerated, but there is no temperature rise. The bloody discharge from the uterus occurs in a majority of patients. This phenomenon is usually accompanied by pain and the expulsion of the decidual membrane, the discharge being due to rupture of the decidua, of a seropurulent, coffee-colored or reddish nature, and may be apparently so profuse as to call for tamponade. In the primary abdominal type there may be no disturbance of the menstrual function. The return of menses is indicative of fetal death. The rectum may be irritable and pulsation can often be elicited by vaginal palpation. The most typical symptom is metrorrhagia coincident with the symptoms of pregnancy in its early stages. If associated with this is a discharge of decidual tissue one should expect extrauterine gestation.

False labor may be premature, happening at the seventh or eighth month, but usually makes its appearance at term, rarely afterwards. At the same time the patient has intermittent pains analogous to true labor pains. The cervix does not become obliterated, but dilates sufficiently for the entrance of one or two fingers. After the decidua is expelled the pain ceases and does not return unless there has been a rupture of the fetal sac. The signs of labor will disappear, and milk will come in the breasts.

The symptoms of rupture are sudden and severe pain radiating over the abdomen, rapid weak pulse, air hunger, shock, and other concomitants of hemorrhage. There is apt to be nausea, hiccough,

extreme tenderness of the abdominal walls. The escape of the fetus from the tube without much loss of blood is marked by severe pain referable usually to the side, tenderness of the abdomen, and often a temperature rise. The rupture may be spontaneous or provoked by some slight trauma.

Physical Diagnosis—The os and cervix are often soft, and either firmly confined by adhesions or pushed entirely out of their natural position by the rapidly enlarging cyst. Fetal pulsation may be felt through the vaginal wall, and the fetus can at times be outlined in the same way. There are two tumors, one of which is usually situated to the right or left of the median line. A sulcus between the adventitious body and the cervix can be made out. In some cases the fetus is palpable through the abdominal wall. On manual examination of a cyst containing a dead fetus of considerable size crepitation of the bones may be obtained. The uterus remains stationary in size after the fourth month. Fetal heart sounds and movements are discernible after the fifth month.

Diagnosis—The diagnosis is nearly always difficult and cannot be made with certainty during the first period. At that time diagnosis of probability constitutes an ample reason for surgical interference. It may be taken for ovarian cysts, fibroid tumors, several forms of salpingitis and hematocele. It may possibly be differentiated from these by the history, the malposition of the uterus, and the disturbance of pregnancy. In the second period of pregnancy diagnosis is not so difficult, but it is nearly always impossible to distinguish one variety from another. In making a diagnosis we have what we can elicit from the story of the patient in her own words, her replies to minute questionings, and a physical examination. After the escape of the fetus from the tube and the beginning of the secondary abdominal type, the acute symptoms may subside, but there are apt to be recurrent attacks of pain. An apparently normal condition necessarily tends to throw the physician and patient off their guard. The diagnosis is naturally difficult, because of the irregularity of the symptoms, the frequency with which it is simulated by other conditions, and the ease with which the bleeding with or without expulsion of the decidua may be taken for ordinary abortion. Probably there are few conditions more

plain to the careful observer than a typical case of exfetation, but comparatively few cases are typical. The diagnosis of abdominal pregnancy is rather rarely made prior to false labor, for the reason that the physician's attention is seldom called to the case. We should regard sudden collapse associated with pallor and other symptoms of intra-abdominal hemorrhage in any woman having a possibility of pregnancy as *prima facie* evidence of a ruptured ectopic gestation sac. A period of amenorrhea usually precedes the bloody discharge which does not correspond in nature or necessarily in point of time with the natural monthly bleeding. Important points relative to the bleeding are the color, the persistence, and the presence of membrane or pieces of membrane. Among the most characteristic symptoms are the variable period of amenorrhea, irregular uterine hemorrhage, the pelvis pain, and discomfort, and the shedding of the uterine decidua. This pregnancy is like a mine, ready to explode without a moment's notice, and it is highly important that the patient be in easy reach of competent surgical skill at all times. It is nearly always best to approach these pregnancies by a median laparotomy. Complete removal of fetus, membranes, and placenta is highly desirable. By reason of dense adhesions, great danger of hemorrhage or dangerous condition of the patient, this procedure will at times be impossible. Under such circumstances the edges of the opening in the sac should be sutured to the parietal peritoneum and the sac carefully drained. The placenta in such cases will come away gradually by fragments, and in two or three weeks its exfoliation will have been complete. Surgical intervention should take place as early as possible after the death of the fetus. If the cyst in such cases is in the cul-de-sac vaginal section is appropriate; after the extraction of fetus and placenta the cavity had best be packed with a five per cent iodoform gauze. I wish to urgently emphasize the absolute necessity for removal as early as a diagnosis can be made, and the stringent indication for immediate operation when we see a pregnant woman showing symptoms of intra-abdominal hemorrhage.

The author reports a case in which the diagnosis was made prior to rupture but operation was not resorted to until a short time after rupture had taken place. Although the placental implantation was

very extensive a complete operation was performed. Although the patient was in a very bad condition from hemorrhage and shock under prompt stimulation she reacted and made an excellent recovery, the wound uniting by primary intention without drainage.

The writer summarizes his paper as follows: The greater frequency of ectopic pregnancy than the number of observed cases would lead us to believe: the usual irrelevant and atypical nature of the symptoms; the difficulties in the way of making a diagnosis and necessity for a careful study of the cases, in which the conditions might be suspected, both in its present and past aspects; the importance of studying the character of the uterine discharges; the association of this with pelvic pain and discomfort, and the signs of pregnancy; the advantages of prompt operation, removal of blood and other debris by dry sponging without irrigation, thorough hemostasis, and the closure of the wound without drainage.

Miscellaneous.

THE ORIGIN OF PULMONARY TUBERCULOSIS.—At a meeting of the Berlin Society of Internal Medicine, February 4, 1907, Dr. Klebs stated that fifty years before, he had already written a dissertation on the dissemination of intestinal tuberculosis through the lymphatic vessels. Experiment has shown that, where tubercle-bacilli appear in small numbers, they are always swallowed up by polynuclear cells, and are carried to the nearest lymphatic gland. It is not impossible that some of the bacilli are directly brought by the thoracic duct into the blood stream, and then infect distant organs; in this way we can readily understand the occurrence of tubercular meningitis in children, and of tuberculosis of the bones. This introduction of the tubercle-bacilli into the lymphatic glands holds good also for the lungs. Flügge's experiments on the direct forcing-in-of tubercle-bacilli into the lungs are not conclusive, inasmuch as great numbers of bacilli were directly forced into the lungs through the trachea. The teaching of Cornil, *i. e.*, inhalation-tuberculosis,

is deeply rooted in the popular mind, but it is clinically incorrect. We oftentimes see married couples, of which one member is tuberculous, live together for many years without the other member becoming infected. Klebs is skeptical concerning infection by way of the air-passages, although he admits its possibility under exceptionally favorable circumstances. In six thousand autopsies held in Zurich, he encountered only one such case.

If this be correct, then two questions arise: 1st, the meaning of scrofula; 2d, the origin of pulmonary tuberculosis. In regard to the first point, Klebs declares himself in accord with all physicians in regarding it as springing from nutritive disturbances of the intestine. But by careful investigation it is found that diseased lymphatic glands infect neighboring organs. When the children of parents with latent tuberculosis have swollen cervical glands, these are tubercular, although no tubercle-bacilli are found in them, and often they are regarded as non-tubercular. But do we really know all forms of tuberculosis? By no means. Klebs mentions a case, as in Chicago, who consulted him for swelling of the testicle. He diagnosed tuberculosis of the testicle, and showed the patient to Ferguson, who coincided in the diagnosis, and recommended extirpation. But no tubercle-bacilli were found in the organ. Klebs then examined many sections of the whole testicle most carefully, and found some black nuclei, some of them with black appendages. He is now more than ever on the lookout for these bodies, which Koch declares to be spores, but which Klebs looks upon as the remnants of tubercle-bacilli that have perished in the conflict waged with the tissues and fluids of the body. The bacilli develop nuclei in certain stages of their development. In this manner, then, arises the possibility that swollen lymphatic glands that are undoubtedly tubercular, may not contain any tubercle-bacilli. It is also possible, perhaps, to demonstrate the tubercular nature of the enlarged glands by inoculation. Thus, all scrofula is of a tubercular nature; therapeutic experiment confirms this. It follows from the above that the specific treatment of tuberculosis should be begun early. The author reported the case of a colleague on whom he had employed tuberculocidin fourteen years before, in whose sputum tubercle-bacilli were found. The colleague felt quite well gen-

erally, had no fever, and auscultation and percussion revealed scarcely any change in the lungs. Very careful investigation revealed occasionally a few bacilli in the scanty sputum. Klebs prescribed tuberculocidin for him, and complete recovery ensued, with disappearance of bacilli from the sputum. Since then, cases of that sort have multiplied greatly. We cannot draw any hard and fast line between open and latent tuberculosis; even in the latter tubercle-bacilli are found now and then. As a rule, Klebs employs tuberculocidin in combination with selenin.

But how does tuberculosis of the bronchial glands manifest itself? It is already well known that a suppurating bronchial gland not infrequently bursts through the lung. A latent perforation frequently occurs, and this, perhaps, the rule. Klebs has found that there is a special kind of sputum, which is characteristic of diseased bronchial glands. In developing young people and up to the age of thirty or more, who are otherwise strong, hemoptysis sometimes occurs; here we find, soon after the hemorrhage, actual masses of tissue with tubercle-bacilli coughed up. A second characteristic is the presence of fragments, or elements, of lymphatic glands in the sputum, which have nothing to do with the cellular elements of the lungs—the peculiar bronchial gland sputum, as it appears in the scanty morning expectoration on hawking.

Here we find very few bundles that are stained by methylene blue. The main mass is homogeneous, in which the typical cells, which are again found in the swollen glands, with homogeneous protoplasm—called by Klebs “macro-bronchocytes.” They often contain blood-pigment. Then the nuclei divide, and dismembered diplococci are seen; later on, gelatinous lumps are found, attaining a size of even 200 microns. At the autopsy they are found in the smallest, non-cartilaginous branches of the bronchi; in the lung-tissue proper, no changes are to be noted. These fragments of the bronchial glands can also enter the arterial circulation.

In such cases, we should endeavor to prevent an outspoken tuberculosis. Klebs gives ten cubic centimeters of a ten per cent. solution of tuberculocidin by mouth in the course of four days. The cure of a declared tuberculosis is very difficult, that is, when

it has advanced beyond the stage of peribronchial lymphadenopathy. We can thus understand why the treatment of tuberculosis in clinics is so unsatisfactory, because the disease, when first seen has already advanced pretty far, and treatment, to be of any avail, should be instituted early in the disease. At times, however, cases of cavity in the lungs improve markedly under treatment.—*Deutsche Medizinal-Zeitung*.—(Translated by A. Mc. S.)

Louisiana State Medical Society Notes.

In Charge of the Publication Committee,
Dr. P. L. Thibaut, Chairman; Drs. Homer Dupuy and Carroll W. Allen.

(Continued.)

WEDNESDAY MORNING, MAY 15, 10:00 O'CLOCK.

PRESIDENT BRUNS in the chair.

Minutes of the previous day's proceedings were adopted as prepared by the Secretary, without reading.

The Secretary read an invitation from Mrs. Bruns to the members, their wives and daughters, to a five o'clock tea Thursday afternoon.

DR. VAN WART read a paper on "Peripheral Nerve Injuries: Their Prognosis and Treatment," which was discussed by Drs. Dupaquier and Gremillion.

Upon motion of DR. E. D. MARTIN the paper by Dr. Weis, which had been passed, was called for, which was then read, being entitled "A Practical View of Bacteriology for the Physician."

Upon motion of DR. THIBAUT, Dr. Edmond Souchon was made an honorary member.

The President announced that the paper by Dr. Evans would be read immediately after the recess.

DR. OSCAR DOWLING read a paper entitled "Report of a Case of Foreign Body Imbedded in the Retina."

DR. EGAN's paper on "Trachoma" was read by title and referred to the Committee on Publication.

DR. E. A. ROBIN read a paper entitled "A New Method of Eneuculation of Eyeball Under Local Anesthesia."

DR. HOMER DUPUY read a paper entitled "The Pathological Relations Between the Frontal Sinus and Affections of the Eye."

These papers, in the Section of Ophthalmology, were discussed by Drs. Salter and Bruns.

DR. E. DUNBAR NEWELL read a paper entitled "What Class of Surgery Should the Country Doctor Do; and What Class Can He Afford to Neglect," which was discussed by Drs. E. D. Martin, Barrier, Abshire.

DR. SCALES announced that the Council had a report, which was read by him.

Upon motion of DR. W. M. PERKINS, that portion of the report regarding the formation of a Society for Western part of Catahoula Parish was laid on the table for one day, and the balance of the report adopted as read.

DR. E. S. HATCH read a paper entitled "The Differential Diagnosis of the So-Called Chronic Rheumatisms, Illustrated," which was discussed by Drs. McIlhenny, Oechsner, and Van Wart.

DR. H. B. GESSNER read a paper entitled "Arterial Varix of the Femoral Vessels Operated on by the Matas-Bickham Method," which was discussed by Drs. Parham and Danna.

DR. DELAUP read a paper entitled "Removal of Hemorrhoids by the Angiotribe Method," which was discussed by Drs. Chassaignac, Parham, Thibaut and Trahan.

DR. MCILHENNY read a paper entitle "The Treatment of Coxitis," which was discussed by Drs. Hatch, Oechsner.

The President stated that through an inadvertence the report of the Council had not been formally adopted, and upon motion of DR. MENVILLE the report was adopted, except that portion relating to Catahoula Parish, which had been laid over for a day.

The morning session then adjourned until 2:30.

AFTERNOON, MAY 15, 1907.

Meeting called to order at 2:30, PRESIDENT BRUNS in the chair.

DR. WILLIAM E. EVANS of Chicago, read a paper entitled "Serums in the Diagnosis and Treatment of Tuberculosis."

Upon motion of DR. LAZARO, a vote of thanks was extended to Dr. Evans.

Upon motion of Dr. Graner, Dr. Evans was elected to honorary membership.

DR. BASS read a paper on "Opsonins and Vaccine Therapy," which was discussed by Drs. Elliott, Halsey, Durel, Evans, W. M. Perkins.

Upon motion, DR. MCGEEHEE then read the paper entitled "A Memorial from the Louisiana Antituberculosis League to the Louisiana State Medical Society.

The paper by DR. MARTIN of Hot Springs, was then called for, the same being entitled "Further Observations on the Physiological Effects of the Waters of Hot Springs, Ark." Discussed by Drs. Bass, Fox and Danna.

Upon motion of DR. FOX, a vote of thanks was extended to Dr. Martin.

THE COUNCIL then submitted an additional supplementary report through Dr. Scales, relating to the case of Dr. Fridge. Upon motion of Dr. Parham the report was adopted.

DR. PARHAM read a paper entitled "The Operative Treatment of Shoulder Dislocation Irreducible by Manipulation," which was discussed by Drs. Martin, Hatch.

DR. WILLIAM M. PERKINS read a paper entitled "Fracture, With Fibrous Union, Treated by Induced Pin-Callus," which was discussed by Dr. Martin.

DR. J. M. BATCHELOR read a paper entitled "Gall-Stone Disease, With a Review of Cases," which was discussed by Drs. Parham, Kimball, Hatch, Bass, Matas, Danna and E. D. Martin.

DR. DANNA moved that the meeting adjourn, to resume the scientific program Thursday morning, the 16th.

WEDNESDAY NIGHT, MAY 15, 8:00 O'CLOCK.

The PRESIDENT delivered the annual address, and FATHER EMANUEL DE LAMORINIÈRE delivered the annual oration.

(Dr. Bruns' address will be found in the July, 1907, issue of the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, page 36; Father de LaMoriniere's Oration, on page 41 of the same issue.)

(Minutes will be continued in next issue of the JOURNAL.)

• CHAIRMEN OF SECTIONS, 1908 MEETING.

The President has appointed the following Chairmen of Sections for the 1908 Meeting, to be held at Alexandria, April, 28, 29 and 30:

GENERAL MEDICINE. Dr. J. B. Elliott, Jr., New Orleans.
DISEASES OF CHILDREN. Dr. R. H. Blackman, Ruston.
BACTERIOLOGY. Dr. C. C. Bass, New Orleans.
SANITARY SCIENCE AND QUARANTINE. Dr. C. H. Irion, New Orleans.
MARITIME AND INLAND SANITATION (Sub-Section. Dr. G. W. Gaines, Tallulah.
NEUROLOGY. Dr. E. M. Hummel, New Orleans.
OTOLOGY. Dr. R. F. Harrell, Alexandria.
OPHTHALMOLOGY. Dr. J. A. Caruthers, Baton Rouge.
SURGERY. Dr. J. L. Wilson, Alexandria.
ANATOMY AND PHYSIOLOGY. Dr. J. G. Martin, Lake Charles.
MATERIA MEDICA AND THERAPEUTICS. Dr. J. B. Guthrie, New Orleans.
GENITO-URINARY. Dr. F. J. Chalaron, New Orleans.
DERMATOLOGY. Dr. I. J. Newton, Monroe.
OBSTETRICS AND GYNECOLOGY. Dr. C. Jeff. Miller, New Orleans.
X-RAY AND ELECTRO-THERAPEUTICS. Dr. S. C. Barrow, Shreveport.
MEDICAL JURISPRUDENCE. Dr. H. L. Ballowe, Buras.
ORAL SURGERY. Dr. S. A. Ayo, Bowie.

ARRANGEMENTS FOR 1908 MEETING.

The Rapides Parish Medical Society is already stirring itself to make the 1908 meeting a success. At a recent meeting of the Society, Dr. C. J. Gremillion was elected Chairman of the Committee on Arrangement, and Hon. Robert A. Hunter, orator.

Medical News Items.

RECIPROCITY IN NORTH CAROLINA. The North Carolina State Board of Medical examiners recently adopted the following rules governing reciprocity in accordance with a State amendment to the Practice Act. 1. The applicant must have a diploma from a medical college requiring a three years' course of study for such

degree. 2. He must have a license from a State Board of Examiners requiring the same per cent. as this State, which is 80. 3. He must present a sworn affidavit from two practising physicians as to his professional standing in his community. 4. The burden of proof shall rest on the applicant. 5. He shall attend the meeting of the Board at the time of application and make application in person. 6. He shall pay a fee of \$10 for his license.

TAXATION OF MEDICAL PRACTITIONERS.—An effort is being made by the Medical Society of Virginia to induce the next Legislature to abolish the State license tax. The *Virginia Medical Semi-Monthly* says that the committee of the State Society, under the chairmanship of Dr. J. B. De Shazo of Ridgeway, has done much good work in arousing the members. It says that of all the States of the Union only six require State license taxes on doctors. These States are Delaware, Virginia, North Carolina, Georgia, Florida and Louisiana. Delaware assesses an annual tax of \$10. Virginia requires \$10 of all who have practised five years or less; after that, \$25 a year for those who reside in cities or towns, and \$15 for country doctors. North Carolina charges a uniform tax of \$5, but no additional city or county tax is allowed. Georgia charges an annual tax of \$10, but no city or county tax. Florida has an annual tax of \$10 to the State, and \$5 to city or county residence of the doctor, but it is expected that these taxes will be removed. Louisiana charges license taxes on the basis of annual collections, the lowest being \$5 each, for State and parish.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION will hold its next annual meeting at New Orleans on December 10-12, 1907. The Secretary of this Association is Dr. W. D. Haggard, of Nashville, Tenn., and the President is Dr. Howard A. Kelly, of Baltimore, Maryland.

REORGANIZATION OF THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS. The Louisiana State Board of Medical Examiners has been reorganized with the following membership and officers: Drs. F. M. Thornhill, Arcadia, president; C. D. Simmons, Baton Rouge, vice-president; F. A. Larue, New Orleans, secretary and treasurer; E. L. McGehee, New Orleans, and J. G. Martin, Lake Charles.

NEW MEDICAL EXAMINING BOARD OF TEXAS. The law creating the new Board of Medical Examiners requires every practitioner in the State to be re-registered, except where actual examinations were taken before the previous multiple boards; all practitioners must register with the district clerk. The law also makes provisions for reciprocity in licenses with authorities of other States and Territories having requirements equal to those established by the new law. The *Texas State Journal of Medicine*, commenting on this last point, seems to appreciate the standard aimed at by some States in recognizing only the diplomas of medical colleges which require the preliminary education and four years' course of instruction now adopted by the Association of Medical Colleges. The *Journal*, discussing this point, says: "If such standards are adopted, and unquestionably from an unprejudiced standpoint they should be adopted, it will greatly reduce the number of medical students matriculating in Texas, and doubtless lead to the closing of several of our medical schools. The adoption of such standards will, of course, be opposed by a certain interested element. There can be no hurry about reciprocity arrangements; in fact, there will be no grounds for negotiation until some board standard has been adopted. Tulane University and the University of Texas have both individually announced that they would meet the above requirements. We urge the Board to a very deliberate consideration of this question to the end that a wise standard may be adopted."

NEW OFFICERS FOR THE SOUTHERN MEDICAL ASSOCIATION. The Southern Medical Association, at its last meeting in Birmingham, elected the following officers: Dr. B. L. Wyman, of Birmingham, president; Dr. W. P. McAdory, of Alabama; Dr. L. M. Folkes, of Mississippi; Dr. Frank Watson, of Louisiana; Dr. R. J. Holden, of Florida; Dr. Raymond Wallace, of Tennessee; Dr. A. H. Fowler, of Georgia, vice-presidents; Dr. Oscar Dowling, of Shreveport, secretary. The convention decided to hold the next year's meeting at Atlanta during the second week of November.

FIRST PROSECUTION FOR SELLING COCAIN. The first prosecution by the Board of Health of the city of New Orleans, under the law passed by the City Council, prohibiting the sale of cocain, or preparations containing cocain, except to physicians or upon the pre-

scription of a physician, was secured September 25, 1907, and resulted in the conviction of Ed. Martin. He was sentenced to pay a fine of \$25 or to serve 30 days in the Parish Prison. The case was appealed to the Criminal District Court.

DONATION TO THE LOUISIANA ANTI-TUBERCULOSIS LEAGUE. The League has received \$180 from a charitable woman to be used in building a memorial cottage. Her donation will be used towards erecting the eighth cottage.

HONORS FOR AMERICAN MEN. The Mary Kingsley Medal, instituted by the Liverpool School for the Study of Tropical Diseases to commemorate Miss Mary Kingsley, the African traveler, has been awarded, among others, to the following: Dr. Charles Finlay of Havana, and Col. W. C. Gorgas, U. S. A., Chief Sanitary Officer of the Panama Canal Zone, for their work in connection with the transmission and prevention of yellow fever, and Dr. Theobald Smith for his investigation on Texas cattle fever.

TOURO TRAINED NURSES. The graduating exercises of the Training School for Nurses of the Touro Infirmary were held on October 1, and four ladies who had completed the three years' course received their diplomas and medals. The graduates were Miss A. B. Foster, Miss J. E. Lafitte, Miss G. G. Goodhue, and Mrs. J. L. Riddle.

GRADUATES OF HOTEL DIEU TRAINING SCHOOL FOR NURSES. At the graduating exercises of the Hotel Dieu Training School for Nurses, held during the past month, six young ladies received diplomas and medals. Dr. E. S. Lewis addressed the class, reminding them that sympathy, intelligence, gentleness and kindness are essential to their future success in the noble work they have undertaken as their life work. The names and residences of the graduates are as follows: Miss Emma B. Bourgeois, Louisiana; Miss Cara Duval Nolan, Mississippi; Miss Lettie Keenan, Alabama; Miss Sadie Rebecca Cornell, Wisconsin; Miss Francis Hamilton Fowler, Louisiana; Mrs. Irene Stephenson Derby, Mississippi.

MEETING OF THE TRI-STATE MEDICAL SOCIETY will take place in Shreveport on November 13-15. This is a growing society, composed of men from Louisiana, Texas and Arkansas.

LOUISIANA REPRESENTED. At the ninth annual convention of the National Association of Retail Druggists in Chicago, Louisiana was represented by eight delegates.

OPENING OF THE COLLEGE OF DENTISTRY. The New Orleans College of Dentistry began its ninth year in October and has 112 matriculates to date. The students of the College, on invitation from the Dean, Dr. A. G. Friedrichs, met and organized an Academic Board.

NEW OFFICERS FOR THE COLLEGE OF PHARMACY. The New Orleans College of Pharmacy, at the October meeting elected the following officers: Mr. George D. Feldner, president; C. D. Sauvinet, secretary-treasurer. Directors: M. T. Breslin, E. J. Marion, C. D. Sauvinet, R. L. Villere, Geo. W. McDuff, A. C. DeMonsabert, Geo. D. Feldner, P. Asher, M. D.; A. O. Kaczoroski, F. C. Goldbold, Selby S. Coleman, M. D.; George A. Moffett. On the faculty are Dr. A. D. Henriques, who was elected in the place of Dr. R. S. Cocks, who resigned to go with the Faculty of the Louisiana State University.

THE TOURO INFIRMARY has a newly completed hydro-therapeutic department.

THE FOURTH QUARTERLY REPORT OF THE LIBRARIAN of the Orleans Parish Medical Society has been issued, and shows many new volumes received.

EXAMINED BEFORE MISSISSIPPI BOARD. There were 114 doctors who took the examination before the Examining Board in October and 87 passed.

RESULT OF EXAMINATIONS BY THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS. The following 25 doctors passed the State Board Medical Examinations in October: W. W. Smith, A. I. Weil, J. T. Reeves, T. B. Crecroft, Louis Heidenrich, J. G. Noles, W. F. Fessey, O. A. Hill, W. A. Stevenson, J. L. Fuller, A. W. Martin, W. P. Buck, Jr., J. A. Coleman, C. T. McDonald, D. J. Dunckenman, E. S. Fulton, J. H. Davis, P. E. Brahic, T. W. Bates, W. H. Horton, Joseph L'Esperance and W. E. Dillon. All

the above are white students. Following is the list of the colored students who passed successfully: A. J. Bryant, H. C. Tate and J. H. Watkins.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY of Manilla opened in September. It is proposed to devote special attention to tropical medicine.

PERSONALS. Drs. R. Matas, W. M. Perkins, C. C. Bass, E. D. Martin, O. L. Porthier, were on vacation during the month of October.

Dr. M. D. Haspel, of New Orleans, has returned from a four months' trip to Europe. He is now located at the Medical Building.

Dr. H. B. Gessner has returned from Europe, where he did post-graduate work in the West London Post-Graduate School.

Dr. E. M. Hummel has opened an office at No. 830 Canal Street.

Dr. A. W. DeRoaldes and wife sailed from Europe on October 27, and will return home after visiting friends in New York for a while.

Dr. O. Czarnowski has returned from a trip to Alaska.

Dr. I. E. Shute has moved from Opelousas to Port Barre, La.

Dr. R. W. Collins has changed his location from Dutchtown to Houma, La.

Among the visiting physicians to New Orleans last month were D. R. C. Webb, Rayne, La.; Dr. O. G. Owen, White Castle, La.; Dr. Theo. Engelbach, Grand Isle, La., and Dr. J. G. Martin, of Lake Charles, La.

MARRIED. Dr. Henry E. Menage and Miss Henrietta Mueller were married October 23, 1907, at the residence of the bride's mother.

Dr. Ewing Fox Howard and Miss Fannie Buck Reber, both of Vicksburg, Miss., were married at Christ Church, New Orleans, the Rev. Charles W. Hinton, of Vicksburg, officiating.

Dr. John Webb McGehee, of Garyville, La., and Miss Elizabeth W. Tillery, of Greensburg, La., were married October 9, 1907.

Dr. Samuel Pace Getzen, of Ft. White, Fla., and Miss Mary Broughton Miller, were married in Birmingham, Alabama, on the 17th of September, 1907.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

Annals of Otology, Rhinology and Laryngology. Fraenkel Festschrift Number.

This extra edition of the *Annals* was gotten up in honor of Professor Bernhard Fraenkel, of Berlin, on the occasion of his seventieth birthday, and is a compilation of nearly a hundred papers by prominent writers of this country and abroad on subjects pertaining to the ear, nose and throat, written for this special number of the *Annals*. As a fitting tribute to this most distinguished scientist, the life and work of Fraenkel are the subjects of special articles and a list of his contributions to literature is given. No more valuable publication of rhino-laryngological literature has appeared in recent years.

DE R. & K.

The Eye, Ear, Nose and Throat. Edited by CASEY A. WOOD, ALBERT H. ANDREWS, GUSTAVUS P. HEAD. The Year Book, Publishers.

This is volume iii, series 1907, of The Practical Medicine Series, published annually, and compiled by the above well-known writers.

The appearance of this book is looked forward to with great interest by the general practitioner, for whom it is intended, and the specialist, who finds in it a concise resumé of the latest accepted theories and methods of practice in these branches of medicine. Even the constant reader will find in it much that has escaped his notice in the mass of medical literature turned out during the past year.

DE R. & K.

Operative Otology, Surgical Pathology and Treatment of Diseases of the Ear. By BLAKE-REIK. D. Appleton & Co., New York.

This is purely a surgical treatise on the ear, and, as such expresses the convictions born of large experience and observation of two recognized authorities. The surgical anatomy of the temporal bone and adnexa comprises the first chapter, and is followed by a description of modern operative technique as applied to the ear. Then come in series chapters on the diseases of the different divisions of the ear, their etiology and surgical procedures employed for their relief. The last chapter is devoted of "Adventitious aural surgery", wherein the removal of adenoids, etc., is considered.

An appendix treats of those important points upon which the authors saw fit to elaborate beyond the extent of the preceding text.

DE R. & K.

Diseases of the Nose, Throat and Ear. By CHARLES P. GRAYSON. Lea Brothers & Co., Philadelphia.

A second edition, revised and elaborated, of the work under this title

previously written by Grayson. The author in combining the treatise on diseases of the ear with that of the nose and throat, holds to the idea, which is well conceived, that the ear may be considered as scarcely more than an appendage of the nose and throat—pathologically and therapeutically, at least.

The text is good and the illustrations clear cut and instructive to the student.

DEB. & K.

Treatise on Anatomy. By HENRY MORRIS, M. A. and M. B. (Lond.), F. R. C. S. (Eng.), and J. PLAYFAIR McMUNISH, A. M., Ph. D. P. Blakiston's Son & Co., Philadelphia, 1907.

This work can be had in 5 volumes or in one octavo volume.

We have reviewed so far but the first two volumes, which include Morphogenesis, Osteology, Articulations, Muscles, Circulation and Lymphatics. It is, like Dacosta's edition of Gray, an English anatomy, certain parts of which have been either revised or entirely rewritten by American anatomists.

It is the first text-book of Anatomy in English to adopt the B. N. A. in its entirety, reference to which was lately made by us in reviewing Prof. Llewellyn F. Barker's book on that system of nomenclature.

It is undoubtedly one of the standard anatomies and as such is well and profusely illustrated.

LARUE.

Lateral Curvature of the Spine and Round Shoulders. By ROBERT W. LOVETT, M. D. P. Blakiston's Son & Co., Philadelphia, 1907.

The author of this little book occupies important positions in Boston hospitals for children, where he has been able to do some of his special work.

He presents the above named subjects in a clear style, beginning with the Physiological Anatomy of the Spine. The oft neglected conditions of spinal curvature are then taken up and handled in quite a scientific manner. The question of treatment follows, including gymnastics with or without apparatus; Passive Stretching; Forcible Correction; Braces and Corsets; and finally Operative Treatment, which, as the author states, is still sub judice. In the chapter on round shoulders we read that Hoffa "inclines toward the view that a weakness of the will is a more important cause than weakness of the muscles."

LARUE.

Postoperative Treatment. An Epitome of the General Management of Postoperative Care and Treatment of Surgical Cases as Practiced by Prominent American and European Surgeons. Together with suggestions concerning the technic of certain operations with a view to securing better postoperative results. By NATHAN CLARK MORSE, A. B., M. D. P. Blakiston's Son & Co, Philadelphia.

This work on postoperative treatment is a book that cannot be too highly commended.

There is, probably, no branch in medicine which is more neglected than that of the after treatment of surgical cases.

A student sees the operation from the bench and is awed by its magnitude and by the skill of the operator. He is given the impression that the operation is all that is necessary. How few graduates begin the practice of medicine in any way qualified to handle cases; a thing which can be acquired by experience only. To the new graduate, and I may add to the old practitioner as well, this book is a most valuable adjunct.

Dr. Morse has looked thoroughly into the subject and quotes from the best authorities in the world.

The postoperative treatment of surgical cases is a book that gives instructions for the care of the patient and the technique during the operation. It is thoroughly practical and will prove a valuable edition to any medical collection.

MARTIN.

Medical Diagnosis. GREENE. P. Blakiston's Son & Co., Philadelphia.

This is one of the leather bound series of medical manuals published by Blakiston, a manual for students and practitioners, with colored plates and illustrations. The author, an experienced teacher, deserves the thanks and praises of the overtaxed student and general practitioner. He has certainly succeeded in making his book a concise, practical and thoroughly modern manual.

E. M. D.

Human Blood-Vessels. MEIGS. J. B. Lippincott Co., Philadelphia.

This is a study of the human blood-vessels in health and disease with one hundred and three original illustrations, obtained in the course of Meigs' service as physician to the Pennsylvania Hospital. The amount of work in this particular reproduction of human blood vessels is wonderful, and no more genuine collection can be had. As a book of the present day in all respects, regarding the anatomy and pathology of blood vessels, this can not be surpassed.

E. M. D.

General Medicine. Volume I, 1907

This is one of the Billings-Salisbury series published by The Year Book Publishers, Chicago. No new items of importance are overlooked, no department of medical research fails to keep the readers fully informed. The series, as usual, is strongly endorsed and recommended.

E. M. D.

Progressive Medicine. March 1, 1907. Lea Brothers & Company.

We note in this interesting volume the articles on infectious diseases, including acute rheumatism and croupous pneumonia, the disease of children. This great quarterly digest of advances in medical and surgical sciences keeps its place in the front rank.

E. M. D.

The Treatment of Disease, A Manual of Practical Medicine. By REYNOLD WEBB WILCOX, M. A., M. D., LL. D. P. Blakiston's Son & Co., Philadelphia, 1907.

It is well for the medical profession that we have among our number men of such robust and sane intellect as the author of this book. Actively engaged in practise, a teacher for years, and one who did yeoman service among the revisers of the last edition of the United States pharmacopeia, it is fitting that Dr. Wilcox should write a work on the practice of medicine, the strongest feature of which is treatment.

"While etiology is important," says the author, "pathology is interesting and a sound basis, and diagnosis is essential, it is from a thorough and broad knowledge of therapeutics in its larger sense that the practitioner will achieve his greatest success and win his most enduring reputation among his patients and the public at large."

We are at present in need of some such teaching as will stay the therapeutic nihilism which has become the fashion among some of the so-called leaders in medicine at home and abroad. Still later, a greater menace has come upon us which threatens to place us in the light of disciples of Mary Baker Eddy. I refer to the vaporings of some who would degrade the true function of psycho-therapeutics and treat organic diseases by suggestion.

The book abounds in useful information regarding the treatment of diseases. If special interest might be mentioned the treatment of typhoid fever by chlorin. The author says: "In concluding the discussion of the treatment by chlorin it may be safely asserted: 1. That in the treatment of enteric fever chlorin can be safely administered without fear of digestive or other disturbance, until the alimentary tract has been completely disinfected. 2. That under its use the tongue becomes cleaner, the appetite and digestion better, the fever lower and the stools devoid of odor save that due to the chlorin. 3. The general strength, intellectual processes and nervous conditions improve. 4. The duration of the disease is shortened and the patient usually proceeds to a rapid and complete recovery. The mortality should not be greater than 2 per cent. Complications are rare because this form of treatment limits the infection."

In the use of acid iodine oleate and phenol-phtalin in the treatment of gallstone disease, as advocated by Wilcox, I can attest their value, having used these agents successfully in a number of cases.

The treatment of the neurasthenia of the menopause contains some suggestions of considerable importance.

Dr. Wilcox has the happy faculty of presenting his subject with concise style, but never sacrifices lucidity to brevity. STORCK.

A Text-Book of the Practice of Medicine for Students and Practitioners.

By HOBART AMORY HARE, M. D., B. Sc., Second Edition, Revised and Enlarged. Lea Brothers & Co., Philadelphia and New York, 1907

This modern text-book embodies the most substantial information on the practice of medicine. Representing, as it does, the experience of one of the most accomplished and careful internists in America. It is well calculated to hold front rank with the best single-volume text-books on the practice of medicine in the English language.

Whenever the necessity arises to elucidate, to strengthen, or to confirm his diagnosis, Dr. Hare has availed himself of the methods of the clinical laboratory, yet never does he lose sight of the patient and of the clinical features of the disease.

The therapeutics of the book is sound, such as we would expect from a man of the author's views and training.

While not extensive, the chapters on diseases of the tropics are ample. STORCK.

Publications Received.

D. APPLETON & CO., New York and London, 1908.

Obstetrics. A Text-Book for the Use of Students and Practitioners, by J. Whitridge Williams, M. D. Second Enlarged and Revised Edition.

P. BLAKISTON'S SON & CO., Philadelphia, 1907.

Text-Book on Diseases of the Skin, by Arthur Van Harlingen, Ph. B. (Yale) M. D. 4th Edition.

LEA BROS. & CO., Philadelphia and New York, 1907.

Progressive Medicine. Vol. IX, No. 3. Hare-Landis. Sept. 1, 1907.

Practical Diagnosis, by Hobart Amory Hare, M. D., B. Sc. 6th Edition.

A Manual of Hygiene and Sanitation, by Seneca Egbert, A. M., M. D.

The Principles and Practice of Modern Surgery, by Roswell Park, A. M., M. D.

J. B. LIPPINCOTT CO., Philadelphia and London, 1907.

Lippincott's New Medical Series. Roentgen Rays and Electro-Therapeutics, by Mihran Krikor Kassabian, M. D.

Human Anatomy. Dwight-McMurrich-Hamann-Piersol-White-Heisler. Edited by George A. Piersol.

G. P. PUTNAM'S SONS, New York and London, 1907.

The Muscles of the Eye, by Lucien Howe, M. A., M. D. (In 2 volumes). Vol. I, *Anatomy and Physiology*.

THE REBMAN CO., New York and London, 1907.

The Cause and Prevention of Beri-Beri, by W. Leonard Braddon, M. B., B. S., F. R. C. S.

E. B. TREAT & CO., New York, 1907.

Heart Disease and Blood Pressure, by Louis Faugeres Bishop, A. M., M. D.

MISCELLANEOUS.

Animal Therapy, Its Relation to Immunity in the Treatment of Tuberculosis, by Dr. Gilliford B. Sweeny, Pittsburg, Pa

Climate of North and South Kona, by E. S. Goodhue, M. D. (Transactions of Hawaiian Medical Society, 1907.)

U. S. Department of Agriculture Bulletin No. 112; The Use of Suprarenal Glands in the Physiological Testing of Drug Plants, by Albert C. Crawford. (Government Printing Office.)

Yellow Fever; Etiology, Symptoms and Diagnosis, by Joseph Goldberger, (Government Printing Office, Washington, D. C., 1907.)

A Friendly Chat and Plain Talk about Mind Reading. Copyright, 1905, by Will U. Reezon.

Freedom of the Press, by Wilmer Atkinson. (Wilmer Atkinson Co., 1907.)

Reprints.

The Hand of Iron in the Glove of Rubber; (2) Harmful Involution of the Appendix, by Robert T. Morris.

Therapeutics in Dermatology, by Alfred Schalek, M. D.

The Status Medicus; A Statement and a Propostion, by James Krauss, M. D.

Medico-Legal, by E. S. McKee, M. D.

Does the Opacity of Incipient Cataract Ever Regain Transparency, by Laertu Connor, A. B., M. D.

The Alkaloids of Ergot, by George Barger, M. A., D. Sc. and Francis Howard Carr, F. I. C.

Should the Size and Growth of a Medical Library be Restricted? by Charles Perry Fisher.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)
FOR SEPTEMBER, 1907.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	12	7	19
Intermittent Fever (Malarial Cachexia)	1	4	5
Smallpox.....			
Measles			
Scarlet Fever.....			
Whooping Cough.....	1	1	2
Diphtheria and Croup.....			
Influenza			
Cholera Nostras.....			
Pyemia and Septicemia	4		4
Tuberculosis.....	28	31	59
Cancer.....	17	4	21
Rheumatism and Gout		1	1
Diabetes	3		3
Alcoholism	9	1	10
Encephalitis and Meningitis.....	6	4	10
Locomotor Ataxia.....	1		1
Congestion, Hemorrhage and Softening of Brain.....	10	2	12
Paralysis	4	4	8
Convulsions of Infants	4	1	5
Other Diseases of Infancy	23	6	29
Tetanus	6	5	11
Other Nervous Diseases	1		1
Heart Diseases.....	41	41	82
Bronchitis	3	1	4
Pneumonia and Broncho-Pneumonia.....	6	14	20
Other Respiratory Diseases.....	2	3	5
Ulcer of Stomach.....		1	1
Other Diseases of the Stomach		1	1
Diarrhea, Dysentery and Enteritis.....	23	10	33
Hernia, Intestinal Obstruction.....			
Cirrhosis of Liver.....	1	6	7
Other Diseases of the Liver	1	7	8
Simple Peritonitis	2	1	3
Appendicitis.....	2	2	4
Bright's Disease	22	22	44
Other Genito-Urinary Diseases.....		1	1
Puerperal Diseases	1	5	6
Senile Debility.....	14	5	19
Suicide	2		2
Injuries.....	24	19	43
All Other Causes.....	15	12	27
TOTAL.....	289	222	511

Still-born Children—White, 17; colored, 16; total, 33.

Population of City (estimated)—White, 251,000; colored, 90,000; total, 341,000.

Death Rate per 1000 per annum for Month—White, 13.81; colored, 29.60; total, 17.98.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 29.96
Mean temperature 79.
Total precipitation 5.21 inches.
Prevailing direction of wind, northeast.

*Paullum seculi distat interit
Celata virtus. — HORACE.*

New Orleans Medical and Surgical

Journal

ESTABLISHED IN 1844.

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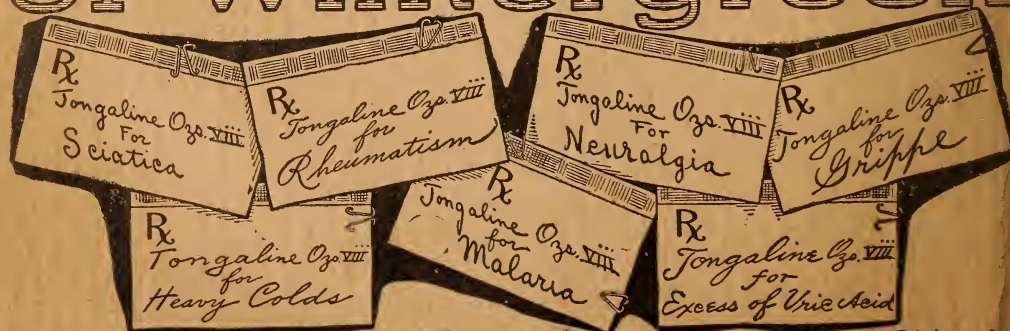
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DECEMBER, 1907.

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(Established in 1844.)

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New Orleans Medical and Surgical Journal.

VOL. LX.

DECEMBER, 1907.

No. 6

Original Article.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a **WRITTEN** order for the same accompany the paper.)

Some Minor Studies in Psychology, with Special Reference to Masturbation.

By DR. AUGUSTIN J. HIMEL, Napoleonville, La.

A moment's consideration of the etymology of the word "Masturbation" (derived from *manus*, hand, and *stupro*, to ravish), will serve to show how limited the field it covers. Self-abuse is a somewhat wider term, but by no means covers sufficient ground, and, for various other reasons, is not satisfactory. The term "onanism" should be rejected altogether. It has, in the past, been used mostly by French writers and is still favored by them, and some include under that head all forms of homosexual connection. The term is confusing and antiquated, and from a psychological point of view, altogether illegitimate. Onan's act was not auto-erotic, but was an early example of withdrawal of the male organ before ejaculation, or "*coitus interruptus*."

In using the term masturbation, we necessarily restrict ourselves, then, to a special and arbitrary subdivision of the great field of "Auto-erotism," a subdivision, it is true, with which physicians and alienists have mostly concerned themselves. Auto-erotism has been defined as "the phenomena of spontaneous sexual emotion generated in the absence of an external stimulus preceding, directly, or indirectly, from another person." In a wider sense still, auto-erotism may include transformation of repressed sexual activity which are strong factors in art and poetry, and more or less give tone and color to the whole of life. Our professor of physiology used to say that a man's testicles and his stomach are the cause of nine-tenths of his actions. Schiller expresses the same thought thus: "Meanwhile, until philosophy shall at last unite and maintain the world, hunger and love impel it onward." The poets, by the way, have ever been the greatest psychologists, and their work in unraveling the tangled skein of nature's secrets can be, if studied, of material aid to science. Let us make a rapid, and, more or less, extensive incursion into that field of auto-erotism which is so vast that it ranges from occasional voluptuous day-dreams, in which the subject is entirely passive, to the perpetual and unashamed efforts at sexual self manipulation sometimes witnessed among the insane. This study is not unimportant, nor simply curious, but full of interest on account of the widely divergent opinions among medical men, and because of the ignorant and chaotic notions prevailing among the laity. There is no reason for leaving this matter in the hands of blind leaders of the blind, and the actual conditions of modern civilization give it a great social significance. The marriage rate is declining, not so much in our own communities, as over the whole country, and illicit sexual relationships are openly discouraged, for obvious reasons, among which may be mentioned, as affecting us particularly, our young white men cohabiting with negro women. This has been widely discussed of late and the practice universally condemned as preventing, or at least, retarding the solution of the negro problem. We may have, in the South, some legislation to supplement our laws against miscegenation. The "taking up" of negro women by white men is a violation of the spirit of these laws. Some of our distinguished Southern statesmen have been

predicting race wars and discussing remedies. Anything like deportation, for instance, removing from our midst the colored females of easy virtue, would cause our young white men, *faute de mieux*, to procure sexual gratification by masturbation. A better understanding of the baneful effects of venereal diseases will also cause an increase in the practice of the solitary vice. Masturbation is said to be prevalent among Englishmen in India, who, if unmarried, are entirely cut off from intercourse with white women and have an intense repugnance for native women.

Revery and day-dreaming, the *delectatio amorosa* of the Latins, is more common with young women than with young men, probably on account of sexual abstinence. It is a private and intimate experience not to be shared with any one but very sympathetic friends. Mabel Learoyd, of Wellesly College, has made a study of that form of it known as the "continued story." She makes no distinct reference to the element of sexual emotion with which these imaginary stories are often strongly tinged and which may be their real motive. The novelist, Hamlin Garland, tells, in his book, "Rose of Dutchess Coolly," of a healthy, normal girl at adolescence, whose thought was dominated for years by the majestic ideal into which she had converted a circus rider. The day-dream may occur in abnormal persons as well as in the normal. Rousseau, in his "Confessions," tells of such dreams connected in his own case with masturbation and abnormal feelings. He was affected with masochism and dreamed of being at the feet of "an imperious mistress, having to submit to her rage, and delighted to beg pardon of her, etc." One case of day-dreaming came under my observation, but of the opposite extreme of Rousseau's, and illustrating sadism. It was the gruesome fancy of a man having sexual intercourse with a crucified woman. There is usually no attempt to realize these dreams. They may or may not lead to masturbation, but generally do, and they grow with the experience of the dreamer. Refined young people, with artistic impulses, by indulging in these seductive and insidious reveries, may become morbid. What clearly indicates the sexual origin of day-dreams is that they usually disappear on marriage. There is but a short transition from day-dreams to wet-dreams. Under conditions of abstinence, in healthy individuals, complete orgasm during sleep

is generally considered normal. The Jews regarded it as an impurity (*Leviticus*, xv-16), and this view has been transmitted to a certain extent to the Christian church. The ecclesiastic writers, under the head of "*pollutio*," have threshed out the subject exhaustively; but notwithstanding the fair and logical attitude of the more distinguished Latin theologians, there has been a prevalent belief in Catholic countries that pollution during sleep is a sin. Luther regarded it as something diseased and advised that girls so affected should marry at once, "taking, he said, the medicine which God has given." Sir James Paget and Lauder Brunton have regarded pollution from twice a week to twice in three months, under conditions of health, in celibates living chastely, as normal, but, quite lately, Moll has taken the view that it is somewhat unhealthy. He makes this ingenious argument "Sexual excitement during sleep is the normal result of celibacy, but it is another thing to say that it is on that account satisfactory. We might then maintain that nocturnal incontinence of urine is satisfactory, since the bladder is thus emptied." To my mind, both are "satisfactory;" the only difference is in the amount of the wetting. There is a difference in the manifestations of auto-erotism during sleep in men and women. Malchoy says that "in women, dreams reverberate during waking hours." Dreams have affected women so strongly that, in certain cases of neurotic subjects, they may even lead to delusions and criminal accusations, such as have been observed in anesthesia. This effect of the day-dream is rarely, or never noted in men. A Narcissus-like tendency of the sexual emotions to be absorbed and entirely lost in self-admiration is mentioned by Havelock Ellis. The germ of it, in women, is symbolized by the mirror. Ellis mentions a typical case of a beautiful woman of twenty-eight, brought up on a farm. She had an intense admiration for her own person, cultivated nakedness, was familiar with all her measurements, and "proud of the fact that they were strictly in accordance with the canons of perfection." There was no marked sexual attraction to the opposite sex and no proof of masturbation.

Sexual excitement, even to the point of orgasm, may be produced by riding, cycling, railroad travel, swinging and hobby horses. Women are especially affected in this manner. The sew-

ing machine has attracted considerable attention on account of its influence in exciting erotic feelings. Certain positions, such as the body thrown forward with the sexual organs near the edge of the seat will favor orgasm. The machine is worked with wonderful rapidity until, with closed eyes and parted lips, a smothered cry is heard and the machine suddenly stops. Deep sighing and general relaxation follow. A case of this nature came under my notice in which I feel positive that the girl had no distinct knowledge of what had happened. I confess that I was, also, at that time, in utter ignorance of the true cause of her heightened feelings, and although I remember noticing the occurrence several times in this young woman, my lack of knowledge made me miss the opportunity of making observations at first hand. In large work-rooms in European cities it is part of the duty of female superintendents to catch and locate the sound of the runaway sewing machines and to make the girls sit properly. Pressure of the thigh alone in males and females, but especially the latter, is sufficient to produce orgasm. Some women have been known to produce it with a pillow between the knees. This is said to be the chief form of masturbation among the women of Scandinavia. This thigh-friction has been observed in female children only a few months old. Townsend, who has written on "Thigh-friction in children under one year," has recorded five cases, all in female infants. They cross the thighs, close the eyes, clench the fists, and in a minute or two there comes complete relaxation with sweating and redness of the face. The children are generally healthy with no abnormal condition of the genital organs.

All examples of auto-erotism are not to be included under the head of masturbation. There are some where the production of the sexual orgasm is not necessarily dependent on any external contact or mechanical cause. Dr. Dansereau has told me of a case of this kind that he saw on the streets of New Orleans, where the mere sight of beautiful women caused a young man to show all the signs of orgasm. This has been termed "psychic masturbation."

Various forms of solitary sexual excitement occur in animals, whether in isolation or in freedom. Our arboreal ancestors may have transmitted the habit to the human race, for the apes are

noted for their salacious temperament. They are the only animals that use the hand. While no female apes are celibates, many males are condemned, from force of circumstances, to a life of celibacy. For these reasons, masturbation has been observed to be more frequent in males, in a state of freedom. Horses have been observed to close their eyes in masturbation, and not during congress with mares. Elephants and bears compress the penis between the hind legs to obtain emissions. Dogs and cats practice mammary masturbation. The pigeons have been studied closely by the English and French, who have written about their habits and given them a bad reputation for virtue. They are said to be the most vicious of birds, and males will often mate with males. The billing and amorous caresses of pigeons may have suggested to man the "*oscula columbæ*," a sin as deadly, according to the theologians, as it is delightful. It must have been this kiss Balzac had in mind when he spoke of it as, in women: "*Le signe du consentement absolu*." I once saw a tame house pigeon, a female, that had such an amorous disposition that, when gently stroked for a few moments, it went off in a kind of fit. I have no doubt it found in that way its sexual gratification, for it was cut off from other pigeons.

Coming back to our muttons, the human family, these phenomena are not entirely confined to civilization, as has been supposed. In a work published in 1883, by Dr. J. W. Howe, on "Excessive Venery, Masturbation and Continence," he says of masturbation: "In savage lands it is of rare occurrence. Savages live in a state of nature. No moral obligation exist which compel them to abstain from a natural gratification of their passions. There is no social law which prevents them from following the dictates of their lower nature. Hence, they have no reason for adopting onanism as an outlet for passions. The normal trammels of civilized society and ignorance of physiological laws give origin to the vice." This, like many other errors relating to savage life, has obtained wide credence. Close observers in many lands contradict this statement of Dr. Howe in every particular. Notwithstanding the most natural conditions of existence, it is found among the people of nearly every race. The Hottentots, Basutos, Kaffirs, and the Balinese are addicted to the habit and treat it as

one of the ordinary facts of life. The Spaniards at Vizaya and in the Philippines found it to be universal, the women using an artificial penis. The habit is widely prevalent in the East, especially among young girls. In India, a medical attendant on the widow of a wealthy Mohammedan was informed by her that she had begun masturbation at a very early age, "just like all other women." There are bas reliefs on the facades of some of their temples representing both sexes playing at "solitaire;" also women masturbating men. It is practiced, by married women especially, in Cochin China.

The Japanese have carried the mechanical arts of auto-erotism to a high degree of perfection. Among the inventions of these people is the "Rinnotama," two balls the size of pigeon eggs, made of thin brass, one empty and the other (the little man) containing a little quicksilver or other heavy metal. These are introduced into the vagina, the empty one first, and placed against the womb. They are held in position by a paper tampon. By swinging in hammock or rocker, a delicate vibration is imparted to the balls, which are never at rest, the resulting titillation producing prolonged voluptuousness, and a feeling as of a gentle shock from a weak inductive electric apparatus, and eventually bringing on the highest degree of sexual excitement. It is known by name to all the young girls of Japan, but is chiefly used by prostitutes and fashionable "Geishas." Its use has extended to China, Annam, and India. Women everywhere have used these instruments, especially those whose professional lives are devoted to pleasure. The artificial penis is traced down from classical times. Burton, in his notes to the unexpurgated edition of *Arabian Nights*, speaks of the "*penis succedaneus*." The Latins called it "*phallus*," or "*fascinum*;" the French, "*godemiche*;" the Italians, "*passatempo*," "*cunus succedaneus*" for men is called "Melkin" in England. The older dictionaries defined it as "counterfeit hair for women's private parts." The Lesbian women used such an instrument made of ivory and gold. The artificial penis was also found at Pompeii. The British Museum has a collection of these and other devices for a similar purpose; Aristophanes and Herondas mention them. During the middle ages the clergy reprobated their use and in the Elizabethian age, Marston made it the subject of some

satires. These special methods of solitary sexual gratification appear to have been confined to the demi-monde and those living on the fashionable and semi-artistic verge of that world. In civilized modern society thousands of articles of every day use have appealed to female devotees of Venus. Almost anything handy has been seized upon to fill the aching void. Let us note the great variety and extent by looking over the list. This list is necessarily restricted, for a great many of the articles will cause no harm and many more are unknown for not having fallen under the notice of the surgeon. Bananas, turnips, carrots and beet roots for country and factory girls. The goddesses of Hawaiian mythology were supposed to have become impregnated by bananas. In recent years surgeons have removed pencils, sticks of sealing wax, cotton reels, hairpins, bodkins, knitting needles, crochet needles, needle cases, compasses, glass stoppers, candles, corks, tumblers, forks, tooth picks, tooth brushes, pomade pots, and eggs from the female vagina, urethra and bladder. About nine-tenths, it is believed, were used in solitary vice, notwithstanding the protestations of ignorance on the part of the patients. In 115 cases of foreign bodies in the bladder collected by one surgeon, 68 were found in men, usually the result of surgical accident, while those in women were introduced by the patients themselves. The commonest form of masturbation, as revealed to the surgeon, is the hair pin, and the literature of surgery in all countries is fairly bristling with them. It was found to be so common in Germany about 50 years ago that a surgeon devised a special instrument for extracting them. In France and Italy there are special instruments for the same purpose. A New York surgeon collected four cases in 1889. Cases are frequent in England and Switzerland. One woman in Switzerland attempted to elude confession, but, on being discharged after operation, remarked to the nurse: "Never go to bed without removing your hair pins; accidents happen so easily." The age of these erethistic females varies from twelve to thirty.

There is a large class of material objects used to develop autoerotism which do not fall under the notice of surgeons. Children may use the corner of chairs, furniture, etc. One woman, a devout church member, masturbated every morning while standing before her mirror, by rubbing against a key in the bureau drawer.

The mention of devout church members reminds me of the remarkable correlation of the religious and erotic emotions. That there is such a relation is well known to all students of psychology and even reluctantly admitted by the theologians. The scope of this paper will not permit more than the bare mention of this phenomenon. We find evidence in the lives of saints, in their prayers and written confessions, of this intimate association between the two most volcanic emotions affecting the human organism. It is in women especially, that we also notice a peculiar transformation of carnal love into intense spiritual fervor. Joan of Arc, who affected so profoundly the destinies of Europe, was wanting in the ordinary physical attributes of womanhood and never menstruated. I feel a great veneration for this famous historical character. To a certain extent she may have been insane, but I would not use the term to express what we ordinarily mean by it, for it was that very condition of mind that brought about those splendid activities on the field of battle that astonished the world. Had she loved a man we would never have heard of her. It has ever been a mooted question, in my mind, whether a woman could love God and a man at the same time.

Many great thinkers have been apparently devoid of sexual feelings, and men and women who will cultivate to the highest degree their spiritual natures are, in many cases, able to lead a life of chastity and celibacy combined. The alienist has found these two forces of love and religion closely associated in insanity. In 1897 in a work entitled "*Psychoses Religieuses*", Vallon and Marie report the case of a woman who masturbated with a crucifix, believing that she thus sanctified the act. Quite recently, in a conversation on this subject with a learned gentleman, a practicing Catholic, he told me that he readily acquiesced in this relation, and made the following remarkable statement: "If," he says, "the incorporation of a small part of the anatomy in ordinary copulation will produce such pleasure, what untold joy in holy communion when the whole body of Christ is received within us." Thus it is, that on account of our fleshy envelope of corruption, restraining the immortal soul in its flight, we are akin to the beasts of the field while holding communion with the gods.

In different countries, writers, who based their figures on care-

ful observation among school children, jail inmates, and young men and women in all the walks of life, put the prevalence of masturbation from 60 to 99 per cent. It is most prevalent in warm countries. It may be rampant in some schools and practically unknown in another. The most usual period among school boys is between the 12th and 14th year. The teacher should be well informed in sexual matters, and, if so, his judgment and tact will dictate the course to pursue in checking the evil of over-indulgence and preventing the teaching of young and innocent boys by the older ones.

On account of women being more secretive, it is difficult to determine in which sex masturbation is most common. Men are very reticent and the conventions make women look upon the subject as not only forbidden but most forbidding. A woman has less candor and sincerity than a man, and this raises many barriers in the way of obtaining data. In very young children it may be more common in females, and this harmonizes with the fact that precocious puberty is most often found in female children. At puberty and adolescence it is probably equally divided between the sexes. "After adolescence," says Havelock Ellis, "there can be no doubt that masturbation is more common in women than in men." He points out that, "by this time, men have mostly adopted some method of sexual gratification with the opposite sex; women are, to a large extent, shut out from such gratification." Some observers give a high percentage of masturbation in women who lead a "lonely life." This must be cut down on account of the large number of women with congenital sexual anesthesia, and also that large class of women whose sexual impulses have been turned (and gratified) into other channels of the higher and larger life of duty and of spiritual and artistic aspirations. They are leading a strenuous existence, in their particular sphere, and are busy doing great things and their minds are entirely free from sexual thoughts.

Let us consider, as briefly as possible, some of the symptoms and results of masturbation. The ancients, especially the Greeks, had regarded it not only with indifference but also as more or less necessary to promote good health. Galen said it was dangerous to retain the semen, a view rather favorable to masturbation, and

Diogenes was complimented in the works of one of his contemporaries for masturbating publicly in the market place. It was in the beginning of the eighteenth century that an Englishman named Bekkers first called attention to the supposed evils of masturbation. His book was entitled: "Onania, or the Heinous Sin of Self-pollution, and All Its Frightful Consequences in Both Sexes, Considered, with Spiritual and Physical Advice." It was written in the style of the quack advertisements in the daily papers of to-day, and recommended a certain "Strengthening Tincture". Tissot, a physician of Lausanne, published a book in Latin in 1760, then in French in 1764, which was translated in all the European languages. He regarded masturbation as a crime, and as "an act of suicide". Shortly after, Voltaire, in his "*Dictionnaire Philosophique*", gave a wider discussion of the subject and is accused of having popularized the habit. In 1836 Lallemand published a work more scientific in character, but also sought to represent masturbation as the source of all evils. These four well meaning, but misguided authors, are said to have done much harm by handing down traditions adopted by many medical writers, putting a powerful lever in the hands of quacks, and causing untold suffering, dread and remorse, experienced in silence, by many thousands of ignorant and often innocent young people. The list of symptoms and results is interminable. "Insanity, epilepsy, numerous forms of eye disease, supra-orbital headache, occipital headache, strange sensations at top of the head, various forms of neuralgia, tenderness of the skin in the lower dorsal region, mammary tenderness, asthma, the appearance of vesicles on wounds, cutaneous eruptions, dilated pupils, eyes directed upwards and sideways, dark rings around the eyes, painful menstruation, catarrh of uterus and vagina, hypertrophied sexual organs, pale and discolored skin, redness of nose, epistaxis, morbid changes in nose, convulsive cough of puberty, acidity of vagina, incontinence of urine in young women, warts on the hands in women, hallucinations of smell, hallucinations of hearing, a statuesque bearing, indican in the urine, and an indescribable odor of the skin in women." Some of these manifestations undoubtedly may occur as results of masturbation in unhealthy persons. Disorders of the eyesight, according to distinguished ophthalmologists, may occur

not only in excessive masturbation, but also in excessive venery, sexual abstinence, and disordered menstruation.

Sir William Ellis and Esquirol have lent their name and influence in spreading the fallacy that masturbation was one of the chief causes of insanity. Many examples are cited where, in numerous institutions, the sole assigned cause for insanity, idiocy, epilepsy and diseases of the spinal cord is stated to be uncomplicated masturbation. No account, apparently, has been taken of the great prevalence of the habit, no attempt to distinguish between cause and effect nor to eliminate the heredity neuropathic element. Maudsley in "Body and Mind," thought that masturbation could produce certain forms of mental disease, but was careful to add that this never happened without the presence of the insane neurosis. This tendency of diagnosis is therefore purely traditional. The first authority in recent years to bring us out of the wilderness of ignorance on this subject is Griesinger, who saw that it was not so much masturbation itself, as the feeling aroused, in sensitive minds, by the social attitude towards it, which produced the evil effects. He wrote: "That constant struggle against a desire which is ever overpowering, and to which the individual always in the end succumbs, that hidden strife between shame, repentance, good intentions, and the irritation which impels to the act, this, after not a little acquaintance with Onanists, we consider to be far more important than the primary direct physical effect."

Dr. Sturgis, who has had extensive experience with venereal diseases in New York, says that coitus and masturbation are identical in effect on the human system, and, while discussing the frequency of both acts, says: "If individuals could cohabit as frequently as they can masturbate, the risk would be as great, because the nervous exhaustion would be as marked and as continuous, and that is the danger point in both cases. This habit, when it produces evil results, produces them for three reasons: 1st, because the physical condition of the patient is not sufficiently strong nor well enough established to resist and to overcome the nervous exhaustion which follows; 2d, because from the fatal facility with which the act may be performed, the continuous practice produces a continuous exhaustion, and the victims have no

time to rally between the performance of each individual act; and 3d, because the feeling of disgust and fright, which has been induced in the patient by the lurid pictures drawn by well meaning but injudicious friends and relatives, tends to beget a nervous depression and hypochondria out of all proportion to the real injury done by the habit."

Expressing the same optimistic view of the subject are these words of Malchow, who in "Sexual Life", 1904, thus sums up his experience and observation: "Honest judgment and frankness demand the statement that in healthy and well born individuals, spontaneous and artificial seminal emissions, or simple masturbation, can produce no evil results beyond some transient functional disturbances, and these are only considerable when the practice has been excessive. We deplore the fact that we cannot consistently say something worse for a practice which is so nasty, disgusting and repulsive, but withal so general throughout the world." While agreeing with the conclusions of Dr. Sturgis, we cannot endorse his statement that coitus and masturbation are identical in effect on the human system. This would argue a poor acquaintance with the act of copulation itself under different circumstances. It is well known that illicit intercourse brings about a fever of excitement that is out of all proportion to that of the lawful, quiet, matter of fact indulgence of married people. The same difference as between two cases of fever, one at 99, the other at 105. Some French writer has characterized the wife as prose, the mistress as poetry, and Shakespeare has made a cynical character speak of the "tired sheets" of the marriage bed. The wildest dreams of the masturbator cannot conjure the thousandth part of the reality, when a woman of flesh and blood, and with "infinite variety", will, like a vampire, drain a man, *nolens volens*, of his very life blood.

We must not conclude that masturbation is normal and be too indulgent in our attitude towards this vice, for, after all is said, it is a vice. Drinking and smoking are vices of which many good things are said. Sixteen men, good and true, have lately taken upon themselves to represent the whole profession of medicine of England and to lift the ban from alcoholic stimulants, and to be "as drunk as a lord" will soon again be the order of the day, at

least in that country. William A. Hammond said that three good cigars a day (brand not mentioned) would not only not do any harm, but would positively benefit a person. A writer in the New Orleans *Times-Democrat*, who signs himself "Ex attache", in a splendid effort some time ago, in praise of the narcotic weed, gives a long list of statesmen and potentates who invariably exerted their influence in the cause of peace, all owing to their being addicted to the calumet.

Our wisest course is to recognize the inevitableness of the vice of masturbation under the perpetual restraints of civilized life, and, while avoiding any attitude of indifference, to avoid also an attitude of excessive horror, for that would only lead to the facts being effectually veiled from our sight, and serve to manufacture artificially a greater evil than that which we seek to combat.

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P. L. Thibaut, M. D., Chairman.

Foreign Body Imbedded in the Retina; Report of a Case.

By DR. OSCAR DOWLING, Shreveport, La.

The object in reporting this case is to bring before you, for discussion, the best mode of procedure and treatment in such accidents.

Tuesday morning, December 13, 1906, Mr. A. C. C., age 21, white, married, car-repairer, was referred to me by the local Hospital Department of the Kansas City Southern Railway. The patient stated that "he was injured while driving a bolt (leg screw) in a K. C. S. freight car, that he was looking up under the car, that a sliver of iron from the hammer struck him in the eye but was removed by his companion, Mr. C. P."

Ocular inspection revealed a marked chemosis of the conjunctiva on the nasal side of the left eye, slight abrasion of the inferior lid and a punctured wound of the globe, midway between the corneo-

scleral junction and the inner canthus, the eye being turned out. Ophthalmoscopic examination was difficult and unsatisfactory through the natural opening so atropin, one grain to drachm, was instilled after taking his vision, which was 20/40, right eye being found to be normal.

Under mydriasis the ophthalmoscope revealed two air bubbles and a small floating white substance in the vitreous, and a marked hemorrhage in the retina, and what I thought to be a detachment of the retina. The vision was now 20/70, but with plus 1.00 sphere he could read 20/30 with ease. The use of the giant magnet produced no unpleasant effect. This was early in the morning, so I advised him to keep quiet and let me see him again in six hours.

When he returned, in the afternoon, the hemorrhage in the retina had almost entirely disappeared, and with the ophthalmoscope there was plainly visible a piece of steel about the size of the point of an ordinary knife blade, imbedded in the retina on the temporal side and a little below the lower margin of the optic disc. The same lens used at his former visit, placed before his eye, gave him vision equal to 20/20 minus. Again the giant magnet was used, but it did not displace or even move the foreign body. Drs. Abramson and Hands attempted to locate the body with the X-ray, but failed to get a satisfactory result. At no time did the patient complain of pain.

The following morning the patient was seen by my confreres, Drs. Chandler and W. L. Egan, at my office, by invitation. Dr. Samuel Ayers, Chief Surgeon of the Kansas City Southern Railway, to whom I had wired the condition of the patient and nature of injury, ordered his removal to Kansas City, where he could be placed in the Main Hospital.

December 24, 1906, the patient returned from Kansas City just as he had gone, except the chemosis had cleared up and the wound united. Vision was same as before. I stopped the atropin, and on December 31 his vision was 20/20 minus without a glass. A few days later he could read 20/20, and since then he has been at work.

The striking thing in this case is the fact that the patient did not suffer any pain and that there was not any reaction, which carries with it the fact that the piece of steel must have been clean.

Norris and Oliver, in the chapter on "Wounds and Injuries of the Eyeball and its Appendages," which was written by Dr. Emil Gruening of New York, illustrate a case with encapsulated foreign body in the retina. In speaking of the case he says "For many years I observed this case, in which a chip of steel had entered the globe, passing through the lens and producing traumatic cataract. After removal of the cataractous lens the foreign body was seen in the retina, encapsulated in a whitish substance and surrounded by an area in which there were slight choroidal changes. Until the death of the patient, fifteen years later, this foreign body caused no irritation or interference with vision, while the vitreous remained transparent and free from connective-tissue formation. In this case lenticular opacity prevented an examination of the interior of the eye, and the patient was kept under observation until the cataract had matured. Extraction of the cataract then allowed me to determine the position of the foreign body."

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A New Method of Enucleation of Eyeball Under Local Anesthesia.

By DR. ERNEST A. ROBIN, New Orleans, La.

Since October 12, 1905, we have been experimenting with a new method of local anesthesia in enucleation of the eyeball. We have used it with success now in thirty-four cases, both in private and hospital practice. The mixture used, in all cases, consists of ten

drops of a 4% solution of cocain, ten drops of adrenalin chloride (1-1000), and twenty drops of normal salt solution, making forty drops, containing altogether 2-5 of a grain of cocain. With a hypodermic syringe, ten drops of this mixture are injected along each rectus muscle, deeply, behind the equator of the eye, and after a five-minute wait the operation is performed in the usual way. Our observation with the first twenty cases showed that the method was thoroughly practicable, though not entirely devoid of pain. Three cases gave no evidence of suffering throughout the entire operation. Those who complained of pain always referred it to the last stage of the operation: that of cutting the optic and ciliary nerves; the stages of dividing the conjunctiva and tendons being particularly free from pain. Those who suffered most in the last stage, compare the pain to having a tooth drawn.

Generally speaking, we noticed that robust and full-blooded men, above the average in weight, complained more of pain than the frail and delicate. As this seemed to suggest the use of a larger amount of the mixture in the former cases, we invariably injected ten more drops of the mixture deeply around the optic nerve, about a minute before severing it, in all our subsequent operations. This practice has fulfilled our expectations, so that now the pain of this stage is reduced practically to the vanishing point. A few of the advantages of the method of local over general anesthesia are:

The patient is conscious and by that fact stands warded against the awful error of removing the wrong eye, an accident of which several instances have been reported within recent years. The amount of cocain used (2-5 to 1-2 of a grain) is almost insignificant and certainly is comparably safer to life than any form of general anesthesia. Finally, the patient seems to prefer it, for we have, since our first case of October 12, 1905, had no trouble in inducing all patients upon whom operation had to be done to select this method.

A Preliminary Report on the Pathologic Relation between the Frontal Sinus and Affections of the Eye.

By DR. HOMER DUPUY, New Orleans, La.

This contribution is regarded by me as a brief preliminary report on a subject which I will at some future date enlarge upon. It is a personal contribution, based on the clinical observation and study of fifty selected cases. Some of the data is obtained from case records referred to me by Dr. H. D. Bruns, from his clinics at the Eye, Ear, Nose and Throat Hospital. Every case from the hospital collection, selected by me for study, has been examined co-jointly by Dr. Bruns and myself. Again some of the material on which these general deductions are based is obtained from my private case record. Further, this contribution is a personal tribute of esteem to the gentleman who holds the presidential office and who has contributed his share in the progress of ophthalmology in the South.

This contribution purposely deals with the frontal sinus, only in its pathologic relations to eye affections. It is well to emphasize that the eye is not an isolated organ with "lenses and strange acting muscles," and that the frontal sinus is something more than a mere anatomical diverticulum of the nose.

The association of the vascular and nervous supply to the sinuses and the eye is established anatomically and clinically.

The frontal sinus deserves the brunt of the blame in most ocular disturbances due to sinus affections. I offer no explanation for this at the present stage of my studies.

In the majority of these cases the pathologic changes in the sinus were actually suppurative. Deficient drainage through the natural outlet was an invariable condition—its presence and the degree of the occlusion resulted in proportioned aggravation of the ocular symptoms. In no instance could I trace a causal relation between certain obscure eye symptoms and a mere irritation of the lining membrane of the sinus with some deficient irrigation—as is related by some observers.

That some of the phenomena about the eye were due to a pure reflex action, transmitted through the fifth nerve to the sympathetic

distribution in the orbital cavity, is apparently supported by the clinical evidence. But in every instance there was present a suppurative inflammation of the sinus. My experience thus far has lead to the conclusion that ocular symptoms, other than abscess formation in the orbit, can be due to either acute or chronic suppurations of the sinus. Whether the eye affections were due to over-distension of the sinus with pus, with a consequent irritation of the fifth nerve terminals in the sinus wall; or whether there was actual obstruction in the anastomotic circulation between the sinus and orbit; or whether there was direct infection through the blood vessels or lymphatics still remains to me an unsolved problem. Theoretically, they are each in themselves possible factors.

The nature of the ocular affections in which my collected cases can be classed, admit of the following grouping:

(1). Changes in the orbital cavity.—Three cases presented orbital abscesses. In everyone there was actual perforation of the sinus wall and exophthalmus; one case presented a fistula in the upper lid.

(2). Affections of the lids.—In about six cases marked edema of the upper lid. These were simple edemas without intra-orbital abscess formation. This symptom, limited to the upper lid, I regard as very significant of a frontal sinus inflammation.

(3). Congestion of the conjunctiva.—This was invariably present in all cases of acute inflammations, and generally absent in the chronic forms, except during an acute exacerbation.

(5). Asthenopia.—Pain in the eye.—In more than half of the cases; suggesting an error of refraction for which it was often mistaken.

(6). Affection of the uveal tract.—In only one case could it be unmistakably traced to the frontal sinus. It occurred under the form of an iridocyclitis.

(7). Ptosis.—Drooping of the upper lid was observed in one instance. Exploration of the frontal sinus showed the presence of pus.

(8). Disturbances in vision.—While the great majority of the patients complained of haziness about the vision on the affected side, the test card did not show actual diminution as to vision for

distance in but a few instances. Retrobulbar neuritis, resulting in amblyopia, was shown unmistakably in one case.

In no instance could we demonstrate in this series of cases the existence of squint, myopia or cataract formation.

In this abstract there is a strong intimation that the relation between the accessory cavities and the eye is still a large and almost unexplored field. This contribution is offered in the hope that it will stimulate research work in the ranks of our own society.

DISCUSSION OF PAPERS ON OPHTHALMOLOGY BY DRS. DOWLING,
ROBIN AND DUPUY.

DR. E. D. MARTIN: I would like to ask if that is the smallest dose of cocain with which the operation can be done. It strikes me as rather a large dose.

DR. SALTER: Dr. Dupuy has sounded the warning note here, as has been sounded elsewhere, about the accessory sinuses and their relation to diseases of the eye. Orbital abscesses, retrobulbar neuritis, acute uveitis, ptosis, chemosis, proptosis, diplopia, muscular insufficiencies, scotoma and edema, are often secondary to sinus affections. Dr. William Campbell Posey, of Philadelphia, emphasizes "the frequency with which edema of the lids is encountered, even in the beginning of cases of sinusitis. The puffiness is usually most marked in the upper lid and particularly on the nasal side, though the entire lid may be swollen. The edema is to be distinguished from the inflammatory swelling and thickness of the lid, which results from cellulitis, as it is entirely non-inflammatory in origin, as well as in appearance, and also from ptosis, which is at times present as a result of palsy of the levator of the lid. The swelling is usually most marked in the morning and disappears during the day, but it is also apt to be brought on by bending the head forward. Like all other ocular symptoms of sinusitis, may disappear for a time, with the discharge of secretion from the sinus, but reappears when the fluid reaccumulates and the congestion of the mucous membrane becomes greater." Persistent headaches of a neuralgic character, I have frequently observed in sinus involvement. These conditions are well worth our study, and Dr. Dupuy is to be congratulated on his most excellent paper.

DR. BRUNS: I would be glad to have a chance to say a few words about these papers. With regard to foreign bodies in the eye, I want to say that in all cases where the patient is not a person of means, so as to be able to secure the best attention instantly; and in all cases where the person's vocation compels him to be away from large centers where such assistance can be given at once, there should be no compromise; the eye must be removed. In instances other than those I have mentioned, there are possibilities of compromise. The reason we are so positive in our opinion is that experience shows that in all cases where the eye contains a foreign body, *if the man live long enough*, he will be attacked with sympathetic inflammation in the other eye. Not long ago I saw a soldier of the civil war who had been carrying in his eye a piece of copper gun cap for more than forty years. He went on thinking himself perfectly secure. When I saw him he had been suddenly attacked in the remaining eye, and was beyond hope. Such a case as that should lead us to impress the truth upon our patients and not permit a man to live in fools' paradise who has a foreign body in the globe.

As to the question of local anesthesia in the enucleation of the eye; it will be a great boon to us if the continued investigation shows that the operation can almost always be done in that way. In reply to Dr. Martin's question, the quantity of cocain used never exceeds a half grain. That is the maximum we have ever been obliged to use. Usually two-fifths of a grain is sufficient. Why do I say it will be such a boon? For twenty-five years I have not approached an enucleation without fear and trembling. In an operation where human life is concerned, you have a serious responsibility to face with the public in case of a fatal issue to the anesthesia, but you cannot give a satisfying explanation to the public if you kill a man with the anesthetic to remove an eye. Now, gentlemen, every man who calls himself a surgeon ought to be able to enucleate an eye, because there may occur at any moment in your practice, far away from the city, an injury to an eye that necessitates its immediate removal. Every one of you ought to feel competent to do it, and ought to teach yourselves to do it.

About removing the wrong eye: I saw a look of incredulity run like a wave across your faces when Dr. Robin spoke about protection

against the removal of the wrong eye. Not less than one or two men of standing in the profession have removed the wrong eye. We often have to remove an eye when there is nothing on the surface to indicate which is to be removed. The mistake has doubtlessly occurred from the surgeon leaving everything to the assistant. In hospital practice that has often to be done. The assistant puts the speculum in the wrong eye, the surgeon rushes in and begins to operate and the thing is done. It is an accident which occurs. It is needless to say that I appreciate the compliment which Dr. Dupuy has paid me, and I can return the compliment. I encouraged Dr. Dupuy to undertake this work, because I knew he would do it. Our great lack in New Orleans is of a class of young men who are willing and able to work, and willing to take a great deal of trouble to learn. The older men have scores of recognized points that need investigation, but they cannot individually investigate all these points. The reason that we see the men in the north and west eclipsing us in a literary way and becoming almost the only medical writers of the United States, while we do not produce much in a literary way for the advancement of the profession, is because every one of these men is surrounded by a corps of young men eager and willing to work. Now, Dr. Dupuy is one of these men. When you point out to him something needing investigation he will work. This investigation is an important one, because while there has been here and there some spasmodic writing—and some ridiculous things said—yet there has been no elaborate, sustained, patiently prepared paper dealing with a large number of cases, and I have tried and am still trying to send all these cases from my clinic, where there is the least suspicion of sinus trouble to him. It is too easy to overlook the accessory sinuses. Since I have had them in mind constantly I have been saved many mistakes.

DR. DOWLING (Closing): I do not know anything that I could add to what I have said except to emphasize what Dr. Bruns has brought out. Every man should be very careful in the prognosis he gives his patient.

Anatomical Observations and Anomalies.

By DR. HENRY BAYON, New Orleans, La.

The anatomical research presented in this paper was conducted in the laboratory of practical anatomy at the Tulane Medical College; the number of observations would have been much larger if every subject had been reliable or accessible; unfortunately, in spite of all efforts made to impress the class with the importance of careful dissection and the request that parts which were the subject of investigation should not be dissected without the assistance of the demonstrators, it happened sometimes that some of our students stumbled on forbidden grounds, and, before realizing it, the field was ruined beyond repair; in other instances, the fault was not with the student, but with the subject, which, through disease or faulty preparation, was not fit to yield reliable information; as much as possible, accuracy has been the essential condition, doubtful cases being rejected; hence the comparatively limited number of examinations. Some of the examinations were made at the request of the Association of American Anatomists, through their Committee of Co-operative Investigation, of which Dr. McMurrich, of the University of Michigan, was the chairman.

The data for investigation were:

First—The lowest root of the spinal accessory nerve in relation to the emergence of cervical nerves from the spinal cord.

Second—Origin, insertion and nerve supply of the brachialis anticus.

Third—Variations of origin of the hepatic artery and its branches.

Not hearing from Dr. McMurrich, I wrote him, asking him if any disposition had been made of the observations, and if they were not to be used to send them back to me, so that I could present them at the State medical meeting. The doctor sent them back, stating that they were not to be used, as originally intended, as but a few colleges had responded to his circulars inviting co-operative investigation.

Fifty-nine observations were made on the spinal accessory nerve in thirty cadavers. The result was, that in the same subject the lowest root was different on the two sides in thirteen cases, and the

same in sixteen cases; in one case the lowest root could not be satisfactorily traced on the right side owing to the mutilation of the cord. In the fifty-nine observations the lowest root was found:

Opposite the second cervical pair 5 times.

Opposite the third cervical pair 25 times.

Opposite the fourth cervical pair 26 times.

Opposite the fifth cervical pair ONCE.

In all of the observations, the lowest root was traced not only as low down as it could be dissected or picked from the cord, but as far as it could be seen, tapering off on the surface of the lateral tract.

Forty-three observations were made on the origin, insertion and nerve supply of the brachialis anticus, SECOND TOPIC. In all, the *origin* of the muscle was constant, from the lower two-thirds of the humerus; the *insertion varied*.

In thirty-seven cases the muscle was inserted to the coronoid process alone; in six cases to the coronoid process and radius just beneath its bicipital tuberosity.

The radial tendon was usually small, apparently nothing more than the oblique ligament receiving a separate bundle of muscular fibers; in other instances, the radial tendon was well marked.

In twenty-seven cases the nervous supply was derived from the musculo-cutaneous only.

In sixteen cases the nervous supply was the musculo-cutaneous and the musculo-spiral.

Thirty-six observations on the THIRD TOPIC: Variation of origin of hepatic artery and its branches.

Aside from considerations concerning the length and size of the celiac axis, the hepatic artery corresponded very accurately to the following type: Origin—Celiac axis; length, 2 or 2½ inches from origin to first collateral branch.

Branches: First, pyloric; second, gastro-duodenalis, dividing into pancreatic-duodenalis superior and gastro-epiploica dextra; third, two or three terminal branches; fourth, cystic from right branch of bifurcation.

From this normal disposition the following anomalies were recorded:

In one subject large cystic branch as large as the other terminal branches: In 3 subjects, no distinct pyloric branch; in 2 subjects, pyloric arising from gastro-duodenalis; in 1 subject, pyloric arising from gastro-epiploica dextra; in 1 subject, hepatic artery equal in size to splenic and gastric; in 4 subjects, hepatic was largest branch of celiac axis.

In 1 subject, small hepatic artery, supplying only part of right lobe of the liver, a large hepatic branch of the gastric supplying the remainder of the right lobe and the left lobe.

In subject, the hepatic was found arising from the superior mesenteric.

Other anatomical observations were suggested by operative disasters and pathological complications.

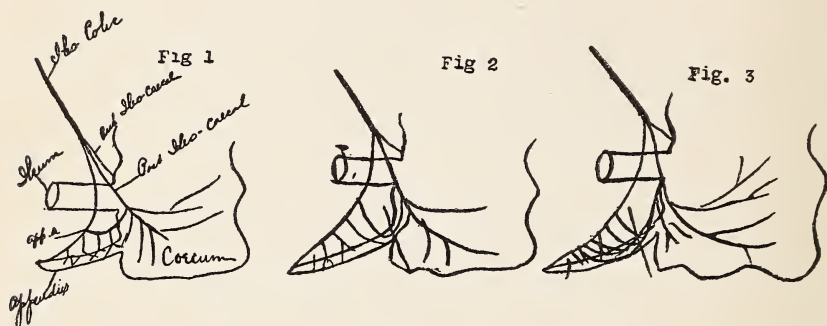
During the past year several cases of severe hemorrhage, sometimes fatal, from the stump of the appendix, have been reported, following the Dawborn method. Seelig, of St. Louis, commenting on the cause of the hemorrhage, explained it by assuming the anomalous course of the appendicular artery through the walls of the appendix, instead of following its regular course between the layers of the mesenterium; with the object of ascertaining the source of the hemorrhage, we have examined thirty subjects; in none did the artery run through the walls of the appendix; in some, especially where the mesenterium was very short, the artery was near the appendix, but it could always be easily separated from the organ. In 60 per cent the origin of the appendicular artery was from the ileo-colic; in 30 per cent from the posterior ileo-cecal; in 10 per cent there were two arteries supplying the appendix, one from the ileo-colic, the other from the posterior ileo-cecal usually, although sometimes—but this is less important—one of the arteries came from the ileal branch of the ileo-colic. The most important feature of the observations referred to the mode of termination of these blood vessels in the ceco-appendical region.

In five of the thirty subjects there was free anastomosis of the appendicular artery, with the posterior ileo-cecal; in one a distinct anastomosis in the mesenterium.

In *three* of the five subjects the limit between the areas of the appendicular and cecal arteries was at the appendico-cecal junction.

In *two* subjects the posterior-ileo-cecal supplied the cecum and the proximal end of the appendix for about a quarter of an inch, and the limit between the areas was on the appendix.

In one subject the artery of the appendix was very large, supplying the appendix and part of the cecum.



Figures Nos. 2 and 3 represent the most important anomalies, and, from the viewpoint of hemorrhage, are practically identical, constituting about 16 per cent of the subjects examined.

That hemorrhage, from the unligated stump, should occur is not surprising; indeed, the surprise is, that it should *NOT* occur more frequently. Kelly describes three types of ceco-appendical circulation: One in which the limit between the vascular areas of the cecal and appendicular arteries is well on to the cecum, a second type where the limit corresponds to the ceco-appendical junction and a third type where the limit is on the appendix. Although it is very true that hemorrhage occurs especially when the third type presents, it seems especially apt to occur when the anastomoses of the appendicular and cecal arteries are large and numerous.

Figure 1 represents a rarer anomaly, which, when present, would favor hemorrhage, not in the cecum, but in the peritoneal cavity.

It is not the purpose of this paper to discuss operative procedures, but two suggestions impose themselves so distinctly that we can not refrain from mentioning them:

First—Ligature of the sero-muscular wall of the stump after retraction of the mucosa, which results from clamp crushing, or, at least, slow amputation with the thermo-cautery knife, so as to obliterate the vessels at the margin of the stump.

Second—The second suggestion, when Figure 1 is considered, is to ligate each individual branch of the appendicular artery at the hilum of the appendix, instead of ligating the trunk.

The other topic investigated was the relation of the common bile duct and the pancreatic duct to the duodenum, whether emptying in common or separately.

The importance of the subject was suggested by the frequency of disease of the pancreas, complicating gall stones.

My records are not sufficiently authoritative, the number of investigations not large enough to warrant statistical conclusions. The subject, however, will be given serious attention in the laboratory and will be presented at some future time, when thoroughly investigated.

Orleans Parish Medical Society Proceedings.

President, DR. JOHN J. ARCHINARD.

Secretary, DR. AMEDEV GRANGER.

141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. AMEDEV GRANGER, Chairman
DR. HOMER J. DUPUY and DR. E. O. TRAHAN.

MEETING OF SEPTEMBER 28, 1907.

DR. C. MILO BRADY read a paper entitled

Health Conditions at La Ceiba, Honduras.

The paper that I am about to read is, in most part, a report made by me to Dr. C. H. Irion, President of the Louisiana State Board of Health. I will say that since the war with Nicaragua and the revolution in Honduras, there are slight immediate prospects of any of the improvements so confidently promised me when I was at Ceiba.

I left New Orleans by the steamship *Rosina*, of the Vaccaro Brothers' Steamship Company, January 19, for La Ceiba, Honduras, reaching that town January 23, and was met on my arrival by Dr. F. A. Matude, who was empowered by the municipal authorities to lend me every possible assistance in my investigation.

Beginning at once on landing, I inspected most of the streets, some yards, the cemetery and the Quartel, or Government Barracks.

I found no stagnant water in any of the streets in town—in fact, no muddy streets at all, though this is at the end of the rainy season; grass and weeds were cut close, and dry garbage piled in heaps, or in boxes and barrels in front of many of the houses.

I am informed that it is the custom of the mayor to issue a bando, or proclamation, every three months, directing the householders to clean their premises and pile the debris in containers in front of their houses for the four city carts to haul away.

It so happened that the mayor had lately issued this warning, allowing the householders till February 1 to comply with the law, thus giving the city carts an unusual amount of work at this time.

I saw nothing but dry garbage hauled away in these carts or in the accumulation of refuse; I learn that a crematory for garbage is in contemplation in the immediate future.

Ten to fifteen cisterns I found properly screened, but I saw ten or more barrels entirely devoid of any pretense of covering, with wigglers swimming about in the bottom of several. I was told there were thirty cisterns in town, all properly screened, and it was promised me, at my suggestion, that all the water barrels would be destroyed, as there was no real necessity for their use.

The principal water supply of Ceiba is from shallow wells on each of the premises, fourteen to eighteen feet deep, and as the sanitary conveniences consist of open closets, which are cleaned only semi-occasionally, one can imagine how readily the water supply can become contaminated through the sandy soil.

At the leading hotel in the town, where I remained four days, the well for washing purposes was at a distance of twenty feet from three closets well filled with fecal matter.

Despite the shallow wells, and the lagoon near by, I found comparatively few mosquitoes in Ceiba and the vicinity, none whatever in the daytime in the shrubbery and public road, or among the banana plantations, but a few at night in the houses. Absolutely no comparison with the number now in New Orleans—January, 1907.

Incidentally, I may mention that passengers who slept on the *Rosina*, lying at the wharf the night before her departure, were

well bitten by mosquitoes, which were a constant but decreasing source of annoyance during the four nights I remained on the vessel. When I returned four days later they had disappeared, and none were found afterward, though I hunted for them without success among the places left free of bananas in the hold of the ship. Indeed, it seems practically an impossibility for mosquitoes to be blown from shore, a distance of from four hundred to eight hundred yards, with the customary direction of the winds, or to be carried in bananas on the lighters to the ship.

I would rather infer from my experience on the *Rosina*, if infected *stegomyia* are capable of flying about in the open, that it would be much easier to infect Ceiba from New Orleans than New Orleans from Ceiba.

I visited all the sick and convalescent cases in Ceiba—two, first with Dr. Matude, then with Dr. A. L. Villa, the only two physicians practicing in the town at that time.

Dr. Matude took me to the *Quartel*, or Government Barracks, a large, two-story, adobe and frame structure, containing offices and inspection room on second floor, with barracks, hospital and prison on lower floor, where ventilation seemed insufficient. I am informed that usually about one hundred soldiers are quartered there, but owing to the unsettled condition of the country, the number now somewhat exceeds two hundred. Those reported as sick, a total of nineteen, were drawn up in line for my inspection. I examined them all—general appearance, pulse, tongue, gums, facies and temperature—when deemed advisable—in two instances, finding one man with fever, of a clearly malarial nature. I found flabby teeth marked, malarial tongues; some apparently filling the mouth, and many evidences of anemia, but none of yellow fever. One man first had a pulse for a few seconds of 60, but a more careful examination disclosed chronic endocarditis, with an irregular pulse, running to a 120 pulsations per minute.

Then, in company with Dr. Matude and Dr. Villa later, I visited each one of their respective patients, who had been under treatment within the past fifteen days. I made a record of their names, diagnosis of disease and duration of illness, and made the same physical examination as I had previously carried out at the *Quartel*.

In the three days I found five persons with a temperature above 99°, including two cases of tuberculosis, two probably of malarial origin and one of auto-intoxication in an infant. This made a total of 52 cases, the great majority of whom had some form of malarial poisoning, as shown by anemia, enlarged spleens and histories of intermittent fevers. I requested both doctors to call me to see any new cases of fever that occurred after my inspection. One child, with fever lasting one day, was reported.

I am reasonably sure that I saw practically every case of sickness in town; an individual, who had little confidence in the constituted authorities, assured me he was perfectly satisfied that nothing had been concealed from me.

In one case, which I saw three times, I obtained a history of fever lasting seven days, with an intermission on the fifth day, without pains, nausea or jaundice, pulse 84, temperature 99, on the seventh day, but found stasis and a moderately small tongue, coated in the center with clean edges and tips. No albumen was found on two tests of the same urine. I was informed by the physician in charge that the patient had been given large doses of quinine the previous day, and that some days before he had been given 80 grains of acetanilid within four hours.

The next day the stasis had disappeared, except in urticarial wheals, which still continued on one arm. This is the only instance of stasis I found in the 52 cases. I was all the more careful because the patient was a young man from the States, sick in the same house in which a Mr. ——— was said to have had yellow fever, December 16, 1906.

In no instance did I get the slightest indication of a hemorrhagic tendency in this case or in any others.

Diseases of the intestines are common among the poorer people, several cases of abscess of the liver were noted, probably others unrecognized.

Many prominent abdomens are seen among the children, due to the frequency of intestinal parasites, as I suspect, to the habit of dirt-eating among many of the children. I had no time to seek for symptoms of uncinaria, though anemia seems very common.

Tetanus neonatorum, as is to be expected, is a frequent cause of

death; also infantile convulsions due to irregular diet or to intestinal parasites without treatment. Many of the so-called malarial fevers in infants, I feel sure, were due to auto-intoxication or inflammatory conditions of the bowels or lungs.

The municipality of La Ceiba is one of the three municipalities in which the Department, or State of Atalantida is divided. In 1902, when the census was taken, Tela contained a population of 2,076; El Porvenir, 3,342; La Ceiba, 3,379. Each municipality includes all the neighboring villages along the coast. La Ceiba government extends from Ramirez and Saltiran, with a population of 350, on the west, to Venita Creek on the east, a distance of 22 miles, and includes eight villages. This is one of the most flourishing departments in Honduras, and the increase in population is estimated as high as 10 per cent since 1900. The town of La Ceiba itself has about 2,500 inhabitants and stretches for three-quarters of a mile along the beach and extending eight or ten blocks backward, narrower and less populous in parts than others. The large majority of the houses are wooden cottages, either, single or double, with occasional two-story frame buildings, and several of brick and adobe, occupied by the more influential classes.

The streets and sidewalks especially are rather narrow, so that most of the foot traffic is on the hard-packed, sandy streets of the town. There are few vehicles in Ceiba, owing to the absence of any country roads, though I saw several lumbering banana wagons drawn by oxen along the beach, and in the lone public road leading to the Congrehal River.

There is an air of general improvement about Ceiba. A second public square is being laid out in the newer part of town, near the Cabildo and ice works, while a road builder from the States has lately laid out and built several streets, and is engaged in building more. The cemetery is improved by a stone and cement coping partly completed.

Most important of all, the municipal authorities are contracting with an American engineer to establish a system of waterworks to supersede the present extremely unsatisfactory sources of water supply. Eight thousand dollars is deposited in New Orleans and more in Ceiba for that purpose.

The beautiful and clear Congrehal River, which flows down from

the mountains and empties into the sea near by, is to be the source of a very satisfactory water pressure, already now in use for the ice works. This stream is also expected to furnish the power for a system of electric lights contemplated later.

There seems the promise of a determined effort on the part of the people of this city to render themselves immune from an outbreak of yellow fever by avoiding the cause.

A lagoon arises in the upper part of town and flows toward the sea, but its mouth is usually obstructed by the sands, and consequently should become stagnant and a source of great danger to the inhabitants. However, I am informed all the deeper part is filled with fish, alligators and turtles. Be that as it may, the pools of the shallow head, overgrown with small bushes, should compete vigorously with other habitats of the anopheles as the source of the very considerable amount of remittent and intermittent fevers that prevail in the community.

To the rear of Ceiba and the entire coast, the nearest at a varying distance of from 5 to 15 miles, are a triple range of mountains of an altitude of from 5,000 to 8,000 feet, with elevated valleys between. Few, if any, interior towns are situated, except on the elevated plateau, above any danger zone.

The district susceptible to yellow fever infection is the narrow strip of coast, as above mentioned, with most of the rest of the country immune on account of the elevation. San Pedro and Choloma, where yellow fever prevailed in 1906, are in a valley on the railroad from Porto Cortez, having an elevation of less than 300 feet.

I learn that there have been for years past a constant and regular communication, by foot and mules, along the shore or by small boats from Tela to Ceiba and intervening villages, a distance of forty miles, and to the west as far as Stevens River, a distance of thirty-nine miles, with occasional intercourse in the same method with Truxillo, a distance of sixty miles from Ceiba.

Thirty-five miles from Tela is Porto Cortez, along the same coast, but with no direct means of communication owing to undergrowth and deep ravines. It is said to be a seven-day journey through the interior over the mountain trail.

Vessels in the fruit trade clear from New Orleans or Mobile for

Tela or Ceiba, stopping at any of the sixteen villages along the eighty miles of coast from Tela to Stevens River for bananas, with visits to the Island of Ruatan or Truxillo for cocoanuts.

There is absolutely no communication of any kind between the ports to the south and the Ceiba coast. Several schooners owned in Utila, an English-speaking island, eighteen miles from Ceiba, the Reporter, Editor, Telegram and Adele, with crews of about twelve men, carry cattle from the Ceiba coast to Belize, in British Honduras, returning with English products to the coast and bay islands. A few small boats carry tobacco from Porto Cortez to all these points, and I am informed a considerable amount of smuggling is carried on.

As a rule, communication is irregular; a commercial traveler, who desired to go to Belize, after remaining ten days in Ceiba, came up to New Orleans with me to take ship for Belize as the most convenient and least expensive method.

I have made a careful study of the mortuary records of the municipality of La Ceiba, which, as I have said before, contains 8 villages, scattered over twenty-two miles of coast and one a couple of miles to the interior.

These go into full details as to the fact of death, and contain a great deal of unnecessary data in connection with the estate and other members of the family, but are often vague as to the exact cause of a death, duration of illness, or village in which one died. The reason for this inaccuracy is the fact that they are recorded by the family, and that 40 per cent of all deaths are unattended by any physician.

The worth of these sworn statements by the family may well be doubted, when we know that three deaths at one time of "congestion" concealed a fierce brawl, in which three men were fairly chopped to pieces with machetes.

The years selected by me for investigation are 1888, 1899, 1900, 1903-04-05-06.

The year 1888 was taken because of the unquestioned yellow fever epidemic in that year.

Population estimated at about 1,000: Deaths first half of the year, 20; second half of the year, 38—making a death rate of 58 per thousand.

TOTAL DEATHS FOR PERIOD OF 15 MONTHS

1899.	Oct. 5, Nov. 4, Dec. 5.....	14
1900.	Jan. 3, Feb. 4, March 2, April 6, May 7, June 3, July 5, Aug. 8, Sept. 3, Oct. 4, Nov. 6, Dec. 6.....	51

Total 65

Of these there were 39 adults and 26 children. The causes of death were as follows:

	Adults.	Children.
Malaria (1 at 10 years)	10	..
Malaria (under 7 years)	8	..
Enteritis	6	2
Convulsions (tetanus, meningitis, infantile) .....	..	15
Consumption	6	..
Pneumonia	5	1
General Diseases (dropsy, diabetes, abscess, fever, etc.)	6	..
External Causes (drowning sunstroke suicide, etc.)	6	..
	<hr/> 39	<hr/> 26
Population about 2,500; death rate per 1,000.....		20

1903.	Jan. 6, Feb. 8, March 6, April 6, May 6, June 9, July 8, Aug. 10, Sept. 7, Oct. 7, Nov. 2, Dec. 4.....	69
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The causes of death were as follows:

	Adults.	Children.
Malarial Fever	10	7
Enteritis	8	3
Consumption	4	..
Pneumonia	5	..
Childbirth	2	..
Senility	2	..
Convulsions .....	..	14
General Diseases	6	..
External Causes	7	1
	<hr/> 44	<hr/> 25
Population in 1902, 3,317; death rate per 1,000.....		20.3

1904.	Jan. 8, Feb. 5, March 6, April 3, May 9, June 4, July 8, Aug. 9, Sept. 8, Oct. 5, Nov. 5, Dec. 9.....	79
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Causes of death were as follows:

	Adults.	Children.
Malaria	9	10
Enteritis	10	7
Convulsions .....	..	9
Pneumonia	8	..
Consumption	3	..
Childbirth	1	..
General Diseases	8	1
External Causes	12	..
Senility	1	..
	<hr/> 52	<hr/> 27
Death rate per 1,000		20.9

1905. Jan. 6, Feb. 2, March 3, April 6, May 10, June 3, July 5,
Aug. 5, Sept. 3, Oct. 7, Nov. 6, Dec. 7..... 63

Causes of death were as follows:

	Adults.	Children.
Malaria	3	9
Enteritis	6	3
Convulsions	1	8
Consumption	4	..
Childbirth	3	..
External Causes	11	1
General Diseases	8	1
Pneumonia	4	1
	<hr/> 40	<hr/> 23
Population 3,800; death rate per 1,000.....		17

1906+1907. Jan. 8, Feb. 5, March 5, April 1, May 6, June 2,
July 8, Aug. 13, Sept. 10, Oct. 4, Nov. 4, Dec 8, Jan.
(1907) 3; (13 months) 71

Causes of deaths were as follows:

	Adults.	Children.
Malaria	7	8
Enteritis	4	..
Whooping Cough	0	11
Convulsions .....	..	11
Consumption	2	..
Pneumonia	2	..
External Causes	11	..
General Diseases	4	8
Childbirth	3	..
	<hr/> 33	<hr/> 38
Population 4000; death rate per 1,000 for 13 months.....		17

I believe these records have been kept with reasonable accuracy, but, considering the apparent low death rate, I have no doubt deaths have escaped registration.

Without the slightest intention or willingness to take part in any manner in the controversy that raged last year, owing to the diverse opinions of the health authorities and the present acrimonious discussion that still continues in La Ceiba, I made careful inquiries from as many persons as possible as to the nature and prevalence of any sickness that existed in 1906, and have recorded extracts from stories deemed most worthy of credence or most contradictory.

It is stated on all sides that a severe epidemic of whooping cough prevailed during the months of July, August and September, with eleven recorded deaths.

In discussing the question whether or not any prevalent disease

other than malaria existed, I was informed by one person that eight funerals had occurred in one day. This was disputed by every other one of whom I inquired, and the consensus of other opinions was that no more than two or three funerals had taken place on any one day last summer.

One person, whose family had been sorely afflicted, informed me there occurred "a fever," locally termed the "five-day fever," in which the sick were quite red at first, and afterward became as if chapped by cold, but did not turn yellow or show any indication of jaundice in any part of the body, even to the time of their absolute recovery or death. I learned this as I was leaving; otherwise I would have made a close investigation as to the nature of this fever.

One person made known to me that his six-year-old child, on the third day of a fever, had a pulse of 48 and a temperature of 103, and he said he knew of another who had a pulse of 60, accompanied by a temperature of 104. In rebuttal one man, who was a firm believer in the presence of yellow fever last autumn, advised me to weigh any statements made by this person with due care, as he had a general idea how the pulse and temperature might range in yellow fever and would color his story accordingly. In fact, the second case was only reported after I had doubted the accuracy of his records in the first case.

So far as I could learn, the only family that suffered the loss of more than one member was the M——s, of native English origin, from the Island of Utila.

The deaths occurred as follows:

1. Mrs. M——, aged 27; taken sick in Ceiba with a fever lasting three weeks. This was diagnosed by the attending physician as yellow fever and treated accordingly. An intermission occurred lasting one week, followed by a fever of a low range of temperature till death intervened at the end of five weeks. A short time before she expired the temperature ran up to 106. The family assured me there was no jaundice nor convulsive tendencies at any time.

2. Her daughter, aged 5 years, was taken sick at Selado, twenty miles away, three weeks after leaving Ceiba, and died in five days without the customary symptoms of yellow fever. Dr. C——, the attending physician, diagnosed the case as one of malaria.

3. About the time of the death of Mrs. M—— at Ceiba an infant niece, aged 13 months, died after an illness of six days. She was taken with fever on Friday following a slight dysenteric attack the day previous, due to overeating, which was relieved by a dose of castor oil. The fever began in the morning without chill or convulsion. She vomited blood from the mouth and passed it from the bowels on Tuesday and several times thereafter till her death occurred on Thursday. Three convulsions occurred before her death. She was perfectly conscious during the attack and called her mother a few moments before she expired. This was diagnosed yellow fever. The members of the family claim there was no jaundice before or after death. Two other members of the family, who were treated by the family physician with quinin, recovered promptly.

The B—— family of native Honduranians had, I am told, a number of sick during the autumn, with one death, in which blood escaped from the mouth.

A synopsis of a sworn autopsy on the body of Manuel R——, a soldier, who died at the *Quartel*, with fever lasting about fifteen days, I give for what it may be worth:

Body normal, cadaveric color, subcutaneous fat normal color, bladder much distended with urine, "retention," normal kidneys, liver enlarged, of normal color and bleeding freely on section. No signs of fatty degeneration or necrosis of Peyer's patches present, and, as well as I could understand, there was no blood in the stomach or intestines. Dr. Matude, who was present at the autopsy, assured me these findings were correct; that there was no attempt at killing mosquitoes in the *Quartel*, and there was positively no unusual sickness among the hundred or more soldiers stationed there.

At every opportunity I made inquiries from different, presumably unbiased, persons. Americans from the States, residing at Tela, Colorado Selado, Provenir and Truxillo—these, with one accord, assured me there was no unusual sickness of any one in these places, nor was there at any time suspicion of yellow fever among them. I was told that fevers were common among the inhabitants, both native and American, of all the towns along the coast.

Tela, Colorado and Truxillo have local physicians in regular prac-

tice. In addition, Tela has representatives of the Louisiana State Board of Health and the P. H. S. M. H. service stationed there during the quarantine season.

During last summer a railroad was being built by the Vaccaro Brothers from Provenir to Colorado, and a camp of two hundred laborers, largely Americans, was stationed near Selado under care of Dr. C., an Italian physician from New Orleans. I am informed there was only the usual sickness among them, with but one death.

After completing the inspection of the town I rode out on horseback to the interior village, two miles away, and then three miles further on to the foothills of the mountains, where one could look down from the narrow trail directly into the river, fifty to seventy-five feet below, with a precipice of the same height above, thus serving as a warning of what to expect when following the trail into the mountains themselves, and the difficulty of passing a properly established quarantine.

Saturday morning, the last day of my stay, I was invited to meet the governor of the department, the officials of the town, and the leading citizens at the Cabildo, or town hall, where I was asked to inform them as to the results of my investigations, and to offer any suggestions tending to improve the sanitary condition of the town.

I told them I had found no indications of the presence of yellow fever in the past fifteen or twenty days, and I felt sure I had been shown all the existing sickness in the city at this time. What had occurred earlier I could not presume to determine. I came to La Ceiba, representing the State Board of Health of Louisiana, to discover if there were any indications of yellow fever now present, and the sanitary conditions of the town existing at this time.

I told them the State Board of Health of Louisiana was not concerned with what had occurred in the past, but with the future; also, so far as I knew, my report could not have the slightest effect, either way, on Federal quarantine.

I told them the sanitation of the town is neither better nor worse than the average Louisiana town of the same size, but that the town of La Ceiba (whatever their opinions may be) was under surveillance, and it behooved them (the inhabitants) to avoid every semblance of suspicion by making use of every possible means of protection and sanitation.

I advised them as to the screening and cleaning of the town, and recommended two general fumigations with sulphur, one to take place in February or early in March and one in June.

These remarks were put in the form of a statement to the President of Honduras, and a request, based on them, signed by all present, asking him to use his best endeavors to ameliorate the severity of the quarantine.

MEETING OF OCTOBER 26, 1907.

DR. E. M. HUMMEL read a paper entitled

Psychic Treatment in Certain Nervous Disorders.

Within the past several years very much has been written regarding the mental therapy of certain functional disorders, more especially the group of morbid manifestations classified as psychoneuroses. The fact that we have until rather recently but vaguely understood the mechanism of production of the phenomena incident to the affections in question has stood in the way of our better treatment of them. As the result of a searching analysis of hysteria, neurasthenia and allied states of partial disequilibrium by such men as Freud, Brever, Janet in Europe, Sidis and others in this country, we now have a better conception of the real nature of these disorders, and as a consequence our therapeutic efforts are more intelligent and successful. Nothing altogether novel has been discovered, nor is there any mystical significance to the barbarous terms with which the literature has been cumbered. But enough accurate knowledge has been sorted from the chaos of speculation to enable us to reclaim a large number of ailing people, who have heretofore, after meeting with discouragement at the hands of reputable physicians, fallen dupes to charlatans, Christian Scientists and the like. How much more in keeping with a man's self-respect is it to cure him of a nervous disturbance by appealing to his logical faculties than by encouraging him to contract a system of delusions. And yet the mere blunt statement to a man that he has no organic disease is not of much avail toward curing him of a functional one. It is a matter of method, as well as of fact.

Since the doctrine of Wundt regarding the mechanism of normal mentalization has gained acceptance, the idiogenetic origin of many psychopathic phenomena has become recognized. Having, then, abandoned the contention that material alteration in neural tissue must be the basis of all deranged function, and having accepted a disordered interplay of psychic motion as the logical explanation of as many psycho-neurotic manifestations, we are better situated to combat such disorders with appeals to reason and the re-education of the patient back into normal channels of thought and feeling.

Discussion of this means of treatment must be, for the most part, an analytical survey of the neuroses themselves, since having discerned the nature of the maladjustment, how to disentangle the misdirected processes is usually patent.

The group of disorders demanding most attention comprises hysteria, neurasthenia, psychasthenia, hysteroneurasthenia, mild melancholia, hypochondriasis, certain conditions indicative of faulty mental habits, giving rise to tics, obsessions and the like. All these have been treated by some as one grand symptom complex, inasmuch as they all imply reduction in mental tonus and loss of conscious or volitional control.

But the greatest of these is hysteria. An intelligent conception of this protean malady is indispensable to the comprehension of so much in psycho-pathology. We must at once get down to the conviction that it is altogether a mental state. All its bizarre manifestations, determined in diversification and number only by the limitations of experience and imagination, are, after all, mental symptoms. It is the mental state, then, that we pay attention to. Janet, in a recent work, defines hysteria as "A form of mental depression characterized by the retraction of the field of personal consciousness and a tendency to dissociation and emancipation of the systems of ideas and functions that constitute personality." It seems that such a retraction of the field of consciousness explains the odd behavior of these patients completely. It is even responsible largely for the inordinate suggestibility of its victim; for being at the time unable to extend consciousness to cerebral areas, where various memory tracings are stored, the subject is deprived of the data of experience by which he must test the validity of whatever presents for consideration, in which manner he is reduced to the

simplicity of accepting every proposition thrust into extant consciousness, even without the show of plausibility. (In addition, hystericals are by temperament too impressionable and over-responsive.) By virtue of this same limitation of higher consciousness, the hysteric becomes oblivious of various sensory stimuli. Therein is found explanation of the amauroses and other losses of special sense function, as well as the peripheral anesthetics. And further, the paralyses, since it is necessary that we consciously apprehend sensations arising through or from a member before we may initiate any activity of that part, inasmuch as such activity is based upon and guided by the organic sensations flowing into consciousness therefrom. The hysteric is paralyzed because he is not conscious of his ability to enact the movements involved. Likewise groups of mechanism implicated in the performance of definite acts, or the complex of an experience, may become emancipated from consciousness, leading the subject into inconsistencies through this amnesic loss. Such is the case in somnambulistic states when the patient is, for the time being, swayed utterly by monoideic conceptions, to the exclusion of his other general experience and customary motives. So-called cases of double personality are instances of alternations between the normal personality and prolonged somnambulisms. In the more grave reductions with convulsive movements and delirium, the subject is completely detached from the real environment, and is performing the weird movements in obedience to hallucinations tantamount to the somnambulistic experience. All the time, of course, the sensations and capabilities are really present, nor is anything in experience permanently lost to him. As remarked above, he can not avail himself of data temporarily out of consciousness any more than he can reckon of an experience he has forgotten. Whether unconscious or amnesic of a thing it does not matter—the terms are nearly synonymous. Contractions of the fields of vision, as shown by perimetric tests, graphically portray what takes place with the scope of consciousness.

We realize, then, that the paralyses, somnambulisms, anesthetics, etc., are mere outward manifestations of an anomalous psychic state. In treating hysteria, consequently, we address all our efforts toward readjustment of a biased consciousness.

In the symptom complex known as neurasthenia we note the following distinguishing characteristics: a state of real or apparent neural exhaustion, having as a cause or basis either a temperamental peculiarity, some diathetic condition, a circumscribed disease, or a vicious circle of auto-suggested depressive influences. The physical diseases causing neurasthenia are not special. Functional neurasthenia, with which we are here concerned, is a mental attitude chiefly. Many peevish whims will be displayed according to momentary provocative circumstances, but the patient is laid open to such accidents by virtue of his being imbued with a sense of exhaustion which inhibits the putting forth of voluntary effort. Aboulia precludes the generation of volitional impulses. Hypochondriacal tendencies are an inevitable consequence, as a sense of fatigue is conducive to a pessimistic frame of mind. The lowered mental tension gives rise to vacillation, inability to fix the attention or sustain intellectual effort, and ready loss of control. "Irritable weakness" is the best synonym that has been invented for neurasthenia. The incident parasthesias are supposed to be misinterpreted organic sensations. The reduced nerve tonus of patients laboring under the stress of exhausting disease of whatever kind is neurasthenia, but it does not engage our attention under such circumstances, as we are accustomed to regard it as consonant to such state, and expected it to vanish when physical conditions improve. As for that, we should not forget that neurasthenic symptoms may mask a grave psychosis. However, standing as an entity, neurasthenia is chiefly a functional manifestation, which has been brought into play by some accident to physical health and has persisted or been exaggerated as a result of a peculiar individual susceptibility to the sense of fatigue or exhaustion, into which sense of inadequacy the patient has become more and more submerged through auto-suggestion.

Young adolescents most often succumb to the psychasthenic form. They readily descend into hypochondriasis or become obsessed with phobias. Youthful adolescents seem to move under a spell of mingled fascination and awe of matters sexual. A deep-seated instinct like the sexual, by its wide ramifications, has its influence on the moods, and it is in accordance with expectations that we find discordant experience of a sexual kind, causing emo-

tional perturbation, wherein the patient is apt to fall a prey to wild imaginings and sulk in dread of dire consequences. Such an incident at this time of life is doubly conducive to psycho-neurotic depressive states. This kind of case gives the most brilliant results with psychic methods.

Anent the less defined anomalies, Freud has made most insistent efforts to penetrate into the sub-strata of such mental states. This writer's psycho-analytical method is based upon the following conception of these disorders: A patient, having had a painful experience (usually of a sexual nature), attempts to forget it.

It cumbers his consciousness, nevertheless—as an unassimilated experience. Somehow it persists and disorders his mental actions. The emotions that it aroused continue to recur, giving rise to insistent thoughts that crop up in consciousness irrelevantly. They may carry with them a symbolic movement or gesture—a tic. Quite often the patient has forgotten the discordant experience (suggesting hysteria). Freud seeks to bring out the morbid link by demanding of the patient a candid avowal, urging him to talk at length of private experiences, which he follows with a searching system of questioning. If the patient can bring up nothing by efforts of memory he is placed in partial hypnosis and again tried. Then he goes through the test word process (explanation). Those who have practiced this method claim to have at times dragged up from subliminal consciousness experiences which the patient had quite forgotten and which proved to be the disturbing link sought, as ventilation of the ancient experience was followed by relief of morbid symptoms.

The symptoms of neurasthenia and hysteria are not infrequently found in the same patient, especially if there be weakened neurotic inheritance. Mild melancholia and hypochondriasis are nearly synonymous terms. The phobias, obsessive ideas, convulsive tics, which patients affected in a certain way are accustomed to indulge, have been pronounced as symptomatic, always of nervous morbidity. So they are often, but if every person who entertains occasionally such squibbles be morbid, the human race is awfully neurotic. I can't escape the conviction that such trivial occurrences are common accidents in normal psychic life, and that their significance is small. Our motives for performing the activities of

daily life are ostensibly rational. Often they are not, really. The majority of people are the victims of little obsessive trains of thought, or action, or a phobia, at times. Note the credulity of many persons for superstitions and signs—though they know such things are silly. Often in perturbed emotional states a man is observed to go through non-purposive movements. These would seem to be incipient tics. The mild phobias are nothing more than instances of little faults committed at times by nearly every one being sometimes allowed to get fixed and too influential. Puberty and adolescence are the times at which these faults are most prevalent. Neurotic subjects are said to possess our smaller defects and faults in an exaggerated degree. Surely this is the case in the disorders just mentioned. An insistent or impulsive idea obtains ready possession of a person of psycho-neurotic tendency, because his temperamental defects favor or permit of such proclivities assuming full-grown expression. But not every person making such slips is temperamentally neurotic—not by any means. The same assertion may apply to many more of the so-called psycho-neurotic manifestations. Either this is a valid opinion, or else neuroses are so prevalent that entire freedom from them is exceptional.

General considerations in treatment—Those who have written extensively on this subject seem to have found it impossible to lay down implicit principles for guidance, and I, therefore, do not hope to. There is, however, a course of procedure common to many cases, which may be set forth somewhat as follows: Having made careful note of the history and subjective complaints in a given case, a most thorough physical examination should be resorted to. The thoroughness of the examination is an initial step toward securing the desired confidence. The examiner's opinion being based upon first-handed information of a reliable kind, he is strengthened in his efforts to impart conviction. The nature of the trouble should then be patiently explained in carefully selected phrases, and, above all, in such a manner as not to offend the susceptibilities of the patient. It should be remembered that these unfortunate people have often been subjected to ridicule at the hands of their friends and relatives, which has caused them to adopt an attitude of obstinacy which renders them inaccessible to expla-

nations, and therefore not amenable to persuasion. The personality of the medical attendant, his intuitive adaptability and tact, will determine his success or failure. He should cautiously preserve his position as medical adviser. Whatever in expression is calculated to give confident assurance should be resorted to. At this crucial stage of the proceeding the physician will have to find his own words, and his success will often depend upon what Oppenheim terms his "dialectic dexterity." The prime object in all cases is to make the patient again master of himself. To do this we must raise him in his own estimation, and step by step teach him how to avail himself of his capabilities. It is probably a consoling reflection to those so ailing that the world is full of nervous patients, and that they have lots of company among worthy people. Again, nervous capacity is only a relative thing. Educate the patient to estimate correctly relative values and teach him to avoid attaching too much importance to the petty annoyances which beset the path of every one—what Dubois calls the "pin pricks of life." The hypochondriacally disposed should be insistently assured that his ailment is not dire in consequence; he must first be eased as to ultimate results; then comes cessation from worry, and finally confidence, when the ailment itself dissipates.

Persistent introspection is dangerous to any man's mental peace and possibly his health. Our sympathetic nervous systems attend to our organic necessities, and we are not supposed to bother our brains with them. The sympathetic system should not be hampered in its vegetative functions by the interjection of conscious impulses. It is the opinion of no less an authority than Oppenheim that certain organic functions can be deranged by constant, thoughtful contemplation of them, especially if there be apprehensive dread of them being diseased. As Dubois says: none of us are perfect, and by insistent attention to our body machinery we find a creaking somewhere, and straightway become alarmed, nervous and morbid. Hence, the great necessity of our endeavoring to correct such a habit and cease looking at our troubles with a magnifying glass.

Ask the patient to strive toward bettering himself and to restrain impulses the result of which are detrimental to his comfort and happiness, if not his health. Every means should be adopted to get neurasthenics to put on a little more pressure and to exert volitional

effort, for to will completely is action itself. Our thoughts move us only when they attain to the dignity of conviction; then is when our sensibilities, emotions and feelings become enlisted. In neurasthenia, especially, it is often desirable to seek to explain to the subject the nature of his nervous mechanism; to teach him the influence of mental representation upon body functions.

Certain dyspeptic troubles, which are recognized to be functional and of nervous origin, are best corrected by prolonged hospital regime, where the physician has absolute control.

Our best weapon against hysteria is suggestion. The distress of this malady can be mitigated by such means. It is sometimes desirable to use physical agencies with the psychic treatment. Partial or complete hypnosis may be resorted to, but of late this has fallen into disuse. Hysterical subjects are very tractable under medical supervision, and they are the most willing patients we treat. Though we frequently fail to cure them, in the sense that we are unable to change a state which is native to their temperament, we do dispel symptoms as they develop in various forms, and by so doing we enhance greatly their usefulness and happiness; and what is of equal importance, we, by study of this grand psychosis, acquire ability to recognize it more readily, and avoid the blunder of subjecting those so complaining to surgical operations and distressing drug treatments.

In the class of cases written of by Freud and Breur the procedure consists in ventilating the discordant experience which has produced the morbid symptoms, of leading the patient back to this break, and, after explanation, assist him in squaring himself with the circumstance in a normal way. This has been termed *catharsis*.

Before attempting to treat nervous people, it is, furthermore, always best to acquaint ourselves with the environment of their lives, the influences that have served to shape their personalities, their education, and especially any discordant sexual affinity they may have contracted. We are then in a better position to advise them how to assert their native and acquired intellectual abilities and to avoid morbid accidents of whatever kind.

Before concluding, I would like to insert a caution against the inference that I wish to advise resort to anything that might savor of deceit or subterfuge; or that might detract from the dignity of

the medical adviser; or that might have a tendency to compromise him as an exponent of sane, straight thinking; or that he say or do anything likely to cast disparagement upon practices in the more exact provinces of medicine—surgery, mechano-therapy and the scientific exhibition of drugs. Especially would I wish to avoid the tendency which many enthusiasts on this subject have manifested, that of going to extremes and wishing to call too many diseases functional, especially certain diseases which we practically know to be organic, but the pathology of which is so subtle and refined as to be beyond our kin because of limitations in our means of research into delicate changes in neural tissue.

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DISCUSSION.

DR. CAZENAVETTE: The essayist has brought before us a most valuable and interesting subject. The psychoneurotic is seen not only by the general practitioner but by the specialist in all branches, as well as by the neurologist. Therefore, should this essay be of interest to us all.

No one will doubt to-day the value and the great benefit derived from the psychical method of treatment in many nervous disorders.

I think that we accomplish a great deal in that respect when we have given our patient a thorough and painstaking physical examination and thereby have gained his confidence.

Although I believe that a number of neurasthenics (psychic) will answer favorably to this form of treatment; it is principally in cases of hysteria that more permanent and rapid good result will be obtained. I hope to hear this more fully discussed by the members present.

DR. HALSEY: The treatment of neurotic patients by psycho-therapeutic methods is a very important and interesting subject, and I wish to thank Dr. Hummel for his very interesting paper and to congratulate him on the choice of the subject with which he has made his first appearance since becoming a member of the society. I hope to hear more of the same sort in the future. In many cases should the man, who is not a nervous specialist, appreciate the importance of such methods in treating patients who are suffering from organic disease. We will meet with better success in such cases if we utilize not only such methods as medicines, foods, baths and so forth, but also make the effort to employ psychical methods as well. There is no doubt that some ardent apostles of psycho-therapy have gone too far in their claims of what can be done by these methods, but many patients with organic disease are sufferers also from psychical disturbance and need this psychical treatment as much as they do medicinal or physical therapeusis.

DR HUMMEL (in closing): I would like to say that I speak with some assurance on the subject under discussion, as I have had experience with the method or methods we are considering. Lest I might seem to be going to some extreme, I took the pains to conclude my paper with the plea that I be not understood as claiming too much for psychic treatment, or as urging its use alone in attempting to relieve conditions resting upon a pathology. The functional neuroses constitute the type of disorder most amenable to psycho-therapy. However, we recognize that there is a psychic factor in many organic diseases—especially nervous diseases—and it is this very phase that occasions the patient mental anguish. Such a state of things causes him to exaggerate the effects of his trouble and robs him of the buoyancy and hopefulness which we know to be immensely helpful in combatting even physical infirmities. Oppenheim, in one of his letters to a tabetic patient, encourages him to take a cheerful view of his incurable but not hopeless plight, and he proceeds to explain to him that his condition is merely an inconvenience, in spite of which many men so hampered have enjoyed happiness and lived to advanced age. I am quite sure that we all recognize the broader, qualified application of psychic methods in all diseases, of whatever kind, where the patient's state

is such as to leave him accessible to cheerful words and assurance. Some time ago one would have exposed himself to the risk of being ridiculed by entering upon an extensive discussion of this subject. But we have of late come to a realization of its importance, and there is no question but that much benefit will be derived from its serious and open consideration.

There is one point I probably failed to emphasize sufficiently in my paper, namely: that our attitude toward psycho-neurotic people has heretofore been altogether wrong. There has been a suggestion of ridicule in our bearing toward them, and we seem to have been in a manner on the defensive lest we be imposed upon by them. Through our misconception of hysteria we have been disposed to treat hystericals as a species of impostors. A patient claimed that he was paralyzed in some way; we proved that he really still had the power he professed to have lost; therefore, the laugh was on the patient. Of course, this was fatal to our usefulness in the case. It is a reproach to us that we have not before now better understood the idiosyncrasies and susceptibilities of psycho-neurotic people. A certain psycho-neurotic woman, in another part of the country, being beset with the customary fears, obsessions and apprehensive forebodings of her kind—as a consequence of a morbid sensitiveness to the exigencies of her environment—went the round of medical men and still found herself sick and disconsolate. Being gifted with brilliant aptitudes, as those constituted like her often are, she, in search of refuge from her nervous vicissitudes, invented a quasi-religion. She, in this way, found relief and naturally proceeded to propagate her cult. Look at the crop of psycho-neurotic people that have been discovered to us! She now has thousands of followers of both sexes, in this country and abroad. Her method consists in teaching the subject to indulge his or her autosuggestive susceptibilities. Under the guidance of her system they repeat over and over again to themselves consoling phrases, until their fears are allayed and they are again calm and comfortable, and by these means they become willing adherents to a silly schism, contrary to their saner scruples. The lesson we may learn from all this is that the psycho-neuroses are terribly prevalent; and that if we trouble ourselves to understand

the nervous and mental states of those so embarrassed we can readily give them the assurances they so much need by patient, rational explanation to them of their ailment and cheerful encouragement. Needless to remark, this kind of treatment is very properly our function, because we are most capable of discriminating intelligently in matters of this sort, and because it is one of the tenets of medicine that we minister to the mind as well as the body.

Let me repeat: It is absolutely necessary that we manifest an intelligent sympathy for the nervous patient, if we wish to maintain our position as medical advisor. We must place ourselves *en rapport* with him; otherwise he sees in our attitude failure to comprehend him or disposition to belittle his complaints. If we proceed from wrong premises and take the wrong tack, though we "speak with the tongues of men and angels," we will avail nothing.

Referring to Dr. Cazenavette's remarks, I mentioned that functional neurasthenia is most amenable to psychic treatment, and I recognized that neurasthenia often rests upon psychical dyscrasias, in which case appropriate physical treatment must also be employed.

In regard to the case Dr. Le Beuf has described, we must discriminate between patients who entertain light obsessions from functional disturbances and those with delusions caused by organic reductions in the brain tissues. When a man holds to a delusive concept in the face of logically opposed facts brought to his notice, we must suspect that organic deficiencies underlie his incongruous mental processes.

In hysteria, through the recession of consciousness from cerebral areas, where motor capabilities are resident, the patient is deprived of conscious control of these capabilities. It is interesting to observe a patient so afflicted try to enact movements in the affected part. I now have under treatment a hysterical patient, who has been paralyzed in a certain way for many months. In exercises contrived to reawakening consciousness for power of movement in the part, as the function is apparently returning, the will impulses miscarry and the fingers are flexed upon volitional efforts at extension, and vice versa, indicating misapplication of psychic impulses.

Dr. Halsey has said that psycho-therapy may be enlisted for the mitigation of many diseases, and that the general practitioner may

find it of daily use in his practice. I quite agree with him. Bodily diseases may be influenced in their course for the better by a cheerful frame of mind on the part of the patient, so I believe.

Answering Drs. Oechsner and Dupuy, I would say that I do not believe it advisable to mislead the patient regarding his condition or the treatment he is undergoing. There are some things which we can not explain to him, principally because he can not comprehend them. Sometimes we find it consistent to maintain a negative attitude, or fail to undeceive a man who has deceived himself or been deceived of his own accord by some circumstances in the treatment. In such instances I do not see that it is incumbent upon the physician to disturb the man's belief, especially if it be harmless or likely to prove of assistance for the moment, but ultimately candor is the weapon with which we accomplish most.

We can not afford to lose sight of the main object of the treatment—that of correcting the mental attitude of the patient. A subterfuge may appear to be of momentary value, but ultimately the trouble will recur in the same or another form. By all means let us avoid anything that might be called prevarication, as through such a procedure we lose the whole situation. Where permissible we, of course, use physical means of treatment in conjunction, but surely it is not justifiable to resort to a risky or radical measure to disabuse the mind of an error. I can but thank Drs. Oechsner and Dupuy for having raised this important point.

Gentlemen, I thank you for the interest you have manifested in this discussion and for your kind indulgence.

DR. W. W. BUTTERWORTH gave "A Talk on the Children's Medical Clinics of the East." (*Manuscript not furnished to Publication Committee.*)

Clinical Society of the Couro Infirmary Staff.

MEETING, NOVEMBER 6, 1907.

DR. SIDNEY K. SIMON reported a case of "*Gastro Succorhea Continua Periodica*."

The patient, a white female, aged 53, had never suffered from any serious gastric disturbance until about one year ago, when, without apparent cause, she became the victim of repeated paroxysms of violent epigastric pain, accompanied by a copious vomiting. These attacks come on at very irregular periods, give no warning of their approach, and do not seem to be occasioned by any error in diet. Usually in the early morning, on an empty stomach, the patient awakes with a feeling of nausea and general distress, which gradually gives way to an excruciating sense of tearing in the epigastric region, which, in turn, is relieved to some extent by the profuse vomiting of a clear, greenish fluid, which follows. At the onset the amount of this fluid may reach as much as a pint or more. On chemical examination the vomitus gives all the reactions of a pure, hyperacid, gastric juice.

Such an attack may last anywhere from 24 to 48 hours and usually terminates as suddenly as it came. The sudden, severe onset of the first paroxysm is succeeded by a period of profound collapse, with subnormal temperature, a weak, rapid pulse, waxy skin and a cool, clammy perspiration. The patient continues to retch at frequent intervals, especially when food or liquid is taken by mouth, and complains of a general soreness of the muscles. The entire abdomen is very sensitive to touch.

On physical examination the thoracic organs are found normal, the abdomen is relaxed, but there is no marked ptosis. No evidence of gall bladder disturbance is found. Arteriosclerosis is not outspoken for one of her years. Outside of a general increase in the deep reflexes, the nervous system shows no abnormalities. No evidence of a tabes dorsalis can be made out.

The patient has always enjoyed average good health. Venereal infection is denied. There is no history of alcoholic addiction. From her girlhood to the time of her menopause, fourteen years ago, the patient was subject to attacks of migraine of a more or less severe nature, occurring usually around the menstrual period.

This is taken to be a very significant point in connection with her present trouble. Soupault has traced a close relationship between the paroxysms of migraine and this form of intermittent gastro-succorrhoea. Mœbius is also a strong believer in the neurogenous basis of the condition. The attacks simulate somewhat those of the gastric crises of tabes, but the picture is easily differentiated. The nerve explosion, as in migraine, may be due to an auto-intoxication. Organic affections of the stomach or neighboring viscera, as in this case, can usually be excluded.

DR. JOSEPH D. WEIS showed three cases—I. A case of "*Hyperthrophic Cirrhosis, with (c) Enormous Dilatation of the Superficial Abdominal Veins. A True 'Caput Medusæ.'*"

II. A case of "*Myocarditis, with Arteritis, Arteriosclerosis, Showing Claudication in Left Thigh.*" The interesting feature was the immediate relief of pain in the leg by use of nitroglycerin.

III. A case of "*Renal hemorrhage,*" in which segregation of the urine showed hemorrhage to be unilateral, but in whom the X-ray discovered no stone, and in whom the tuberculin reaction was negative. Physical examination was also negative. The case was shown to illustrate the difficulty of diagnosis.

DR. EDWARD S. HATCH gave a "*List of Orthopedic Cases*" treated in the recently created department from March 1, 1907, as twenty-three, and the number of patients as sixty.

He showed four cases of "*Tubercular Spinal Disease,*" discussing the different methods of treatment in the different cases, and showed that it is necessary, in order to get the best results, to change at times the treatment which, up to a certain stage, seemed to be giving results.

This was illustrated, in one of the cases shown, by the marked improvement in the condition of spastic paraplegia of over one year's standing.

One of the other cases proved the necessity of the use of orthop-

edic measures, in addition to the general surgical treatment in old suppurating, tubercular bone disease.

The doctor showed a case of "*Hypertrophic Arthritis of the Spine*," and spoke of the differential diagnosis of the condition, and the difference in the treatment between it and Pott's disease.

He also showed photographs of a case of Paget's disease.

DR. PAUL M'ILHENNY, from the same clinic, spoke of a case of "*Old Anterior Poliomyelitis*," in which, by massage and tenotomy of the Achilles tendon, he had gained some function in the extensors of the foot one and one-half years after the onset of the disease.

DR. J. B. GUTHRIE exhibited "*Two Cases of Epithelioma*," showing symptomatic cure after curettement and vigorous exposure of base of ulcer to X-rays.

This is the plan of treatment which, in his experience of five years, gives quickest and surest results. It is important to give the exposures intensely.

He further showed a case of "*Psoriasis*" of long standing, which was yielding beautifully to treatment.

Following the exhibition of cases, a series of radiographs of injuries of the elbow joint in patients from 5 years upward was, also shown.

In several instances, the radiographs gave the first inkling of the nature of the injury. Dr. Guthrie expressed it as his opinion that, given an injury of this joint in a patient of any age, but more especially in a child, a radiograph was essential to correct diagnosis.

His experience at Touro showed that in this joint particularly the clinical diagnoses are apt to be at fault.

As part of the radiograph exhibit, a plate, showing acute osteomyelitis of the os calcis where operation was performed by Dr. Bickham, on the radiograph diagnosis, was also shown. Dr. Bickham gave an outline of the surgical aspect of this case.

DR. JOSEPH CONN reported three cases showing special points of interest.

I. Case:—Mrs. R.; aged 35; no history; unable to speak English. She was removed to the Touro at 8 p. m. Diagnosis made as "*Hemorrhage in Broad Ligament*." There was a suspicion of ectopic pregnancy or some traumatism, but failed to elicit any evidence externally, nor any signs on opening the abdomen.

Operation revealed a large hematoma, plainly occupying the entire left cavity; this was punctured, and a great quantity of dark blood flowed from the tumor. The sac was punctured and search made for the bleeding point. The posterior peritonæum was denuded up almost to the kidney. The peritoneum was sewed on entire attachment to the lower pelvis; the ovary could not be found; it must have degenerated owing to pressure. The sac was taken out and sewed in the broad ligament. In the entire operation only one ligation was resorted to, and that was with the Fallopian tube, which was done by transfixion. Patient recovered.

The point of interest in this case was the operation for hemorrhage, but could not detect the bleeding point, as the entire surface was oozing. What was the hematoma due to?

II. Case:—Diagnosis: "*Adeno—Carcinoma of Uterus.*"—Mrs. A. C.; aged 46; married. Family history: Aunt died of carcinoma of uterus; otherwise history negative. Menstruated at 16. Present illness: Has had hemorrhages every 2 or 3 months for past two years. September 1 had a severe hemorrhage, lasting seven days; no pain. She was admitted September 28. Patient was very much emaciated, weighing 100 pounds; skin pale and dry; mucous membrane anemic from loss of blood. Blood examination: Hemoglobin, 20 per cent. October 2, hemorrhage from cervix, lasting until October 10. Tampons and douches were of no avail. The patient was almost exsanguinated. She was practically bleeding to death under our eyes. It was decided to operate and a complete hysterectomy was performed. The patient stood the operation admirably. That night the patient showed some weakness, so an intravenous infusion was given and the patient made a very good recovery.

The point in this case was to save this woman's life from an inevitable death by hemorrhage.

III. Case:—Diagnosis: "*Epithelioma of Cervix.*"—Mrs. N. G.; aged 40; married. Family history: Negative. Menstruated at 13; regular; married at 17 years; has had 14 children; two normal twin pregnancies. Present illness: Has been suffering with constant pain in lower abdomen for several months; has had metorrhagia and menorrhagia. Examination showed patient well nourished; plethoric mucous membrane and hypermic; weight, 160 pounds;

external genitals normal. The cervix showed a linear laceration through the entire cervix; upper or anterior surface was hard and indurated; under or posterior surface showed the same appearance. A cauliflower excrescence on cervix, which was friable and hemorrhagic. A portion was excised. A V-shape was cut from the posterior margin of the cervix and an examination was made by the pathologist. The examination proved unsatisfactory. I then amputated the entire cervix. This was sent to the pathologist, who found the specimen containing epithelioma.

A complete hysterectomy would have been performed in the first instance had the pathologist given the same results as in his second findings.

The point in this case is, that under the circumstances, the entire uterus should be removed and give the patient the benefit of the doubt for the sake of safety.

DR. R. M. VAN WART reported a case of "*Cerebellar Tumor*."—The patient was a well-developed, well-nourished boy of 10 years. The family and personal history were unimportant.

The first symptoms appeared in August, 1905. The patient had an attack of headache and vomiting, lasting three weeks, followed by double vision. At varying intervals to May, 1907, the attacks of headache and vomiting returned. At that time he became blind in the right eye. The patient was first seen in October, 1907, and presented the following symptoms. Double optic neuritis, with complete atrophy in right eye and one-fourth vision in left eye. There was great weakness, out of all proportion to the apparent physical development, and marked hypotonia. The right lower facial was weak. There was slight ataxia on the right side. During an attack of headache hemiasynergia was present on the right side. There was also slight spasticity and ankle clonus. The gait was normal. These symptoms and physical signs were considered as the result of a tumor in the right cerebellar hemisphere. On the strength of this diagnosis the patient was operated upon by Dr. Bickham and a cystic glioma found in this region. The patient unfortunately died thirty-six hours after the operation, probably from shock.

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The Red Cross Emblem.

We have received a communication from Dr. R. M. O'Reilly, Surgeon-General of the United States Army, who is a member of the Executive Committee of the American National Red Cross, forwarding resolutions adopted by that committee on October 18, 1907.

These resolutions call attention to the fact that in the treaties of Geneva in 1864 and 1906 the emblem of the red cross on a white ground and the words "Red Cross" or "Geneva Cross" were adopted to designate the personnel protected by the international convention; also that the emblem is to be used only for this purpose, whether in times of peace or war. They further show that "the signatory powers engage to take measures necessary to prevent the use by private persons, or others than those upon which the convention confers the right, of the emblem or name of the Red Cross."

Accordingly the American National Red Cross, which has due authority through their charter granted by Congress in 1905, requests that all hospitals, health departments and like institutions kindly desist from the use of the red cross, on account of the above mentioned facts, and suggests that any other appropriate emblem, such as the green St. Andrew's cross on a white ground, be used instead; it could then be called the "Hospital Cross" and be used to designate all other institutions save the Army and Navy Medical Departments and other aid societies authorized by the government.

The Executive Committee also requests that all individuals or corporations which employ the Red Cross as trade mark, or for other business purposes, gradually withdraw this emblem and substitute anything else they may deem appropriate, as the provisions of the treaty previously mentioned suggests the enforcement of the prohibition of the use of the emblem should not be made later than five years after the treaty went into effect.

We believe the request of the Surgeon-General of the Army is timely and reasonable, and we refer thus at length to the subject in order that our readers may lend their assistance so that this country may properly carry out the international duty it assumed by making the agreement with the other great powers. There is too much tendency in this country, anyway, to use any and all emblems in a promiscuous or frivolous way, and we should all do our share to abate this evil and particularly when it relates to matters medical and, as in this instance, where the practical reasons are obvious.

State Standards of Medical Education.

With each year the various States have become more and more occupied with the qualifications of the applicant for medical licensure to practice. In a short space of years radical innovations have taken place in many States and the standards have risen to a plane of distinct excellence in their requirements. Democratic rules obtain yet in some States, where conditions seem to have demanded these, as in primitive communities, where the practitioner of medicine has needed encouragement, rather than obstacles, to practice.

Certain groups of States have grown into a uniform requirement and understanding, so that reciprocal arrangements have resulted or are under way. The ultimate goal aimed at is far away still, and it will require a revision more than once or twice to have a concerted standard for the entire country.

Medical education in the schools has kept pace with State requirements, and in some States the school must be accredited by the State in the obligatory standards for admission and graduation of medical students.

It is remarkable that the numerical host of students does not seem to grow any less under the increased difficulties, but the followers of the medical course accept the added tasks and struggle on and after the rewards of an abused profession.

The reflection over the struggles of the profession itself to secure State control of the practice of medicine must cause a high sense of satisfaction to those who have spent time and service in this object. But in raising our standards for medical students and of

medical graduates we must not overlook the State standards as applied to the moral side of the matter.

As difficulties have arisen in the attainment to prerequisite qualifications to a license to practice, the easy road has grown in existence. The parasites of the regular school of medicine, as discovered in the bone-manipulators, various scientists (sic!) and the like, have tried to creep in and in some States have succeeded.

Such States as New York, Texas, Illinois, etc., have accepted the osteopath on medical examining boards and content themselves with the idea that in time the standards of medical education as required by State Boards will naturally do away with the weaker representatives. The very evil itself of having to acknowledge such quackery is excuse sufficient for throttling it. Here in Louisiana the medical profession has enjoyed a certain protection under State laws, laws enough to protect the public as well if kept effective. Attempts are constantly made, however at opening the way to the bone manipulators, and it will need watchful care to see that the law is preserved.

Very soon the medical profession will have the opportunity of electoral privileges, and every physician in the State should see to it that his vote is cast for a representative to the State Legislature who will preserve the interests of a high standard in the profession.

The local profession in the various sections of the State should right now create an organized interest in the minds of their representatives to the end that the highest sort of law should stand against the under-educated, the unqualified and the dishonest charlatan—pretenders to the privileges and protection of the law.

Abstracts, Extracts and Miscellany.

Department of Obstetrics and Gynecology.

In Charge of DR. P. MICHINARD and DR. C. J. MILLER, New Orleans

ECLAMPSIA AND NEPHRECTOMY.—Spencer Sheill (*Jour. Obst. and Gyn., Btsh. Emp.*) relates the history of a patient after nephrectomy for tuberculosis, who became pregnant and devel-

oped eclampsia. In concluding the history of this case he raises some interesting points. The question of advising against marriage, or of its postponement till the menopause is, he thinks, hardly to be entertained for, it is unlikely to be seriously considered. He agrees with Ferguson in the opinion that marriage should be advised against until three or four years after nephrectomy, in order to allow of a physiological hypertrophy of the remaining kidney. The induction of labor in threatened eclampsia, if the child is viable, and if the mother's condition resists radical treatment, has been successful in his hands in several cases. It is, in his opinion, the best treatment for all concerned.

The total amount of urea excreted in 24 hours is a very important guide; had he been governed by the amount of albumen (which never rose beyond 0.15 per cent. in the last pregnancy) he would have had a false notion of the work done by the kidney and of the intensity of the intoxication of the patient, for, although we cannot estimate the amount of the toxins present, except by their effects, we know by experience that as urea excretion diminishes markedly, so will symptoms of toxemia assert themselves. Then the important question of absolute prevention of further pregnancies, by operation, presents itself. If the patient has shown her utter incapability of carrying a pregnancy through successfully, he believes resection of the tubes is to be strongly advised in the interests of all concerned.

VERSION OR HIGH FORCEPS.—Brown (W.) (*Buffalo Med. Journal.*) states that excluding Cesarean section, the treatment of the fetal head, delayed above the pelvic brim, may be roughly divided into two classes of cases. The first includes all cases where prompt delivery is necessitated by the condition of the mother, *e. g.*, toxemia with profound sepsis, eclampsia threatened or present, and, perhaps, a concealed accidental hemorrhage. In these conditions, as is well known, the uterine contractions are often infrequent and inefficient. In this class version is indicated. In the second class fall all cases of dystocia, due to the large size of the fetal head in relation to the pelvis. The operation is undertaken for the benefit of the child and there is scarcely ever any need for a hasty delivery. In this class, high forceps are indicated. The author lays stress on the necessity of dilating

the soft parts before attempting extraction, and such dilatation must be obtained manually, or instrumentally, if not already present. In the high forceps operation the axis-traction instrument is to be used, and if the head is lying transversely it should be applied to brow and mastoid. When the head has passed the brim the forceps should be re-applied to grip the sides of the head.

GONORRHEAL CYSTITIS.—Hunner (*Amer. Jour. Obst.*) states that his usual treatment for trigonitis has been the direct application of an irritant, usually silver nitrate. Some cases recover very quickly after a few applications of strong solutions of silver nitrate, say 10 to 20 per cent., applied through a hollow speculum once a week. More recently he has had good results by leaving in the bladder a one per cent. solution of protargol. Many writers report the use of protargol in four, five and six per cent. solutions, but he has usually caused acute cystitis when trying a solution of a three per cent. solution, and now never uses an instillation stronger than two per cent. Some cases are most obstinate and resist all manner of local treatments applied directly to the trigonum, or indirectly through the anterior vaginal wall. He has not tried the making of a fistula for these persistent cases, but he believes it might prove effective in that it would place the bladder as a physiological rest, and prevent accumulation of urine over the sensitive mucous membrane. For persistent ulcers of the trigonum, he has found the actual cautery of great service.

Department of Therapeutics and Pharmacology.

In Charge of DR. J. A. STORCK and DR. J. T. HALSEY, New Orleans.

THE TREATMENT OF BALDNESS.—(*La Tribune Médicale* for January, 1907, gives the following recipes (Ewald's Treatment for baldness.) At the start apply:

- Tincture of cantharides4 c.c.
- Balsam of Peru, white wax, of each.....8.0
- Oil of rosemarydrops 20
- Vaseline 60.0

Later, if the baldness persists:

Balsam of peru, tincture of cantharides, of each	10.0;
Oil of jasmin, oil of neroli, oil of rose, oil of bitter almonds, of each	15.0;
Sterilized beef marrow	50.0

Brocq's treatment is as follows:

Acetic acid, glacial	5.0
Tincture of cantharides	10.0
Tincture of rosemary	25.0
Tincture of jaborandi	25.0
Rum	150.0

Mix. Apply to the scalp daily.

Barré uses in baldness in convalescence from various diseases:

Hydrochloric acid	4.0
Essence of lemon	150.0

Mix. Apply night and morning.

Lassar uses in alopecia:

Naphthol	50.0
Alcohol	100.0

Wash the scalp with tar soap; then apply the above and wash in Van Swieten's solution.

A prominent dermatologist in New York uses the following formula as a cure for dandruff and incipient baldness; the amount of castor oil should be varied to suit the case, and the mixture should be well shaken before using:

Resorcin	3i
Betanaphthol	3ss
Chloral hydrate	3ii
K. cantharides	3iv
K. capsicum	3i
Castor oil	3ss to 3ii
Cologne water	3iv
Bay rum enough to make	OI

The following is taken from some therapeutic notes published in the *New York Medical Journal* of Dec. 15, 1906:

When the baldness is not due to a parasitic cause, such as ring-worm or favus, or to a general cause like syphilis, various methods have been recommended. Lassar (*Deutsche Medicinische Wochenschrift*, July 5, 1906) applies the following:

℞ Sodii carbonatis,
Potassii carbonatis, à à.....15 grams;
Saponis70 grams;
Aquæ rosæ100 grams.

M. The scalp is to be shampooed with this preparation and with warm water, and washed with water at ordinary temperature, then dried with a towel. Applications are then made with:

℞ Hydrargyri bichlorid0.30 grams
Phenolis liquefacti6 grams
Aquæ distillatæ150 grams

M. To be applied for half an hour, on a compress.

When the compresses are removed the hair is dried in the air, and the scalp is next rubbed with:

℞ Thymolis0.25 grams;
Alcoholis (90°)100 grams.

M. After this has dried, a small quantity of the following pomade is used:

℞ Acidi salicylici1 gram
Tincturæ benzoini2 grams
Olei olivæ50 grams
Olei bergamottægtt. xv.

The *Revue pratique d'obstetrique et de gynécologie* (Oct. 10, 1906) recommends a similar method of treating baldness:

The scalp is to be washed with tar soap, daily, for a period of six or eight weeks; later the application is to be made less frequently. The scalp is rubbed for ten minutes, and then the soap-suds are removed by a stream of warm water. Following this the scalp is to be washed with cold water and dried with a towel and a little of the following is used with friction:

℞ Hydrargyri bichloride 0.5 grams
Aquæ distillatæ150 grams
Glycerini, spiritus odorati, a.a..... 50 grams.

—*The Therapeutic Gazette*

J. A. S.

TREATMENT OF GALL STONES. The use of the bile acids and their salts is more scientific than the administration of the bile itself because they are the physiologically active principles, of this substance, and any danger from the introduction of poisonous bodies from the bile, which really is an excretion, is thus avoided. Of all the preparations sodium glycocholate, in $\frac{1}{2}$ to 3 grain (0.032 to 0.2) doses as frequently as is necessary, is the best. Both bile and its salts are, however, uncertain in action. Acid sodium oleate, like salicylic acid, is excreted by the epithelium of the bile ducts and so assists in disinfection. Phenolphthalein, although a phenol derivative, does not dissociate in the intestines to any appreciable extent; this drug continues its antiseptic effect through the length of the intestinal tract. If the acid sodium oleate is carefully prepared and is combined in a pill with salicylic acid obtained from natural sources, $1\frac{1}{2}$ grains (0.1), phenolphthalein 1 grain (0.065), and menthol, which is a carminative, acts as an intestinal antiseptic, increases peristalsis and allays nausea, $\frac{1}{4}$ grain (0.016), we possess a very efficient means of combating gall-stone disease. This combination is best prescribed, on account of the difficulty of obtaining the proper sodium oleate and of manufacture, as probilin pills; 4 to 8 pills should be taken daily in a full glass of hot water. Following this medication the elimination of gall-stones of the hepatic variety is generally rapid. That the process may be painless is best achieved by the administration of amyl valerate, 15 minims (1.0) in capsules two hours before breakfast and after supper." (The Treatment of Disease by Reynold Webb Wilcox).

I have used practically this same line of treatment in four cases of gall-stone disease with excellent results.—(J. A. S.)

Department of Internal Medicine.

In Charge of DR. E. M. DUPAQUIER, New Orleans.

MORE ABOUT OPHTHALMO-DIAGNOSIS.—Continuing to consider this recent advance in medical science, we have the following to add to what has been reported in the October number:

From the *Edinburgh Medical Journal*, October, 1907 (J. S. Fow-

ler, M. D., F. R. C. P., *Ed.*, etc.), we note, in a special article on the subject, that Calmette has lately (*Presse méd.*, Paris, 1907, June 19) introduced a new means of diagnosing tuberculosis by the use of tuberculin, which, if his results be confirmed, seems destined to be of great practical usefulness, avoiding, as it does, both the inconveniences attaching to diagnostic inoculation and the complication of determining the opsonic index, and being of so simple a nature as to bring it within the reach of any practitioner. The test has received the name, "Ophthalmo-Reaction."

Short as has been the time that has elapsed since the publication of Calmette's observations, a number of communications, all bearing out the value of the ophthalmo-reaction, have appeared in the French press.

Letulle (*Presse méd.*, Paris, 1907, July 3) reports on fifty observations on patients selected at random from his service. One case specially referred to is that of an old morphinomaniac, suffering from nephritis, and admitted in a dying condition, covered with boils, abscesses and ulcers from hypodermic injections. Four days before death he showed a positive reaction, and at the autopsy an unsuspected lumbar abscess from spinal caries was discovered. A second example of the value of the test was furnished by a patient suffering from very severe typhoid, who developed consolidation of an apex. Convalescence being very slow and unsatisfactory, with evening rises of temperature, tuberculosis was suspected. The test, however, was negative, and events showed it to have been right. Letulle rates the prognostic value of the ophthalmo-reaction as high as the diagnostic importance, and to indicate this quotes the case of a nurse who contracted mild typhoid, in the course of which a small focus of pulmonary consolidation was detected. She made a good recovery, and would have been discharged without more ado but for the positive ophthalmo-reaction, which was taken to mean tuberculous lung mischief, for which a further course of treatment was instituted. In Letulle's opinion the ophthalmo-reaction is of great value in deciding whether a patient with signs of former lung disease is really cured, or whether the tuberculosis is only latent.

Comby (*Presse méd.*, Paris, 1907, August 10) reports his observations on the reaction in children. He first used a 1-100 solution of tuberculin, but finding that this at times evoked a rather severe

reaction—injection of the globe, epiphora, fibrinous, purulent exudation, and edema of upper and lower eyelids—he now employs a strength of only 1-200. This he has tried in 108 cases, without ever producing more than the moderate reaction, which is as conclusive as the severe one, without being attended by any inconveniences. According to him, the earliest indication of a positive reaction is shown in five to ten hours by slight redness about the internal canthus and swelling of the caruncle. Very often the reaction remains, limited to its seat of origin, but a more generalized conjunctivitis may occur. Three grades of reaction are distinguishable: (1) Slight, which may pass unobserved, unless the inner canthus is carefully looked at and compared with that of the opposite eye; (2) moderate, giving the aspect of a wild, acute conjunctivitis; and (3) violent, resembling purulent ophthalmia. The last never occurs when a 1-200 solution is used. The reaction should not be tested unless the eye is quite healthy; there is no other contra-indication. In Comby's series of 132 cases sixty-two reacted, seventy did not; he gives no details as to the clinical diagnosis, but states that four post-mortems from the first set revealed tubercle, while six from the second set showed its absence. He concludes by saying that the ophthalmo-reaction is a certain, safe and practical means of diagnosing tubercle in the child.

Sabrazio and Dupiérié (*Gaz. hebdomadaire de médecine et de chirurgie*, 1907, July 1) report a series of cases of the application of the test, and give clinical details. They distinguish the same three grades of reaction, as well as an early (six hours) and a late (twelve hours) reaction. Some of their observations may be summarized:

Five cases of phthisis in different stages, all bacteriologically verified. Reaction early in four, late in one, moderate in four, slight in one. Pyrexia produced in one case. The reaction had no relation to the severity of the tuberculin injection. Two doubtful cases (no bacilli found), one with signs and symptoms of phthisis, the other with symptoms only, and a history of hæmoptysis. The first gives a positive, the second a doubtful, reaction. Two cases of pleurisy, one recent, with exposure to tuberculosis infection, one of old standing; both gave marked reaction—one early, the other late. Cases of enlarged cervical glands, a consolidation of an apex, osseous tubercle, and senile tubercle, also gave a reaction. As regards the

cases of cured tubercle, one, an old woman of 75, who was known to have had phthisis years before, gave no reaction; while a second case of healing tuberculosis, in which bacilli had disappeared from the sputum, gave a slight reaction.

Department of Ear, Nose and Throat.

In Charge of A. W. deRoaldes, M. D., and Gordon King, M. D.
New Orleans.

CHLORETONE AS LOCAL ANESTHETIC IN LARYNGOLOGY.—Chloretone in the form of a fine powder is highly recommended by Fiacre, of Paris, as an insufflation in cases of laryngeal inflammation, associated with pain, especially in the dysphagia of laryngeal tuberculosis. The drug may also be sublimated in a glass tube and blown into the larynx in the form of vapor which gives rapid and great relief, lasting at least two or three hours. This, by enabling the patient to swallow sufficient nourishment is a great aid in the treatment of tuberculosis of the larynx. The drug is also accredited with a considerable degree of antiseptis. (Transactions French Laryngological Society, 1907.)

THE ALVEOLAR OPERATION FOR MAXILLARY SINUSITIS.—Melville Black, in the September *Laryngoscope*, comes out strongly in support of the old alveolar operation on the maxillary sinus, claiming that more radical measures are seldom if ever necessary. The paper was prompted by the article of Dr. Walter Wells advocating his nasal route operation and condemning the alveolar method.

Black claims that by making a free opening through a tooth socket, having the cavity irrigated daily, curetting with a Miles curette, and applying carbolic acid to the interior, he has succeeded in curing his cases within three or four months. He uses no tube for drainage, but has made a small dental plate to cover the opening, and if the opening closes too soon he reams it out with a cataract knife.

[The writer cannot agree with Dr. Black that such procedure is sufficient to cure all cases, nor is it just to your patient to have him submit to four months of treatment when, by opening the canine

fossa, thoroughly curetting the cavity, draining through the nose and immediately closing up the buccal wound, the patient can be cured in two weeks. This operation (Caldwell-Luc), when done under cocain anesthesia, is more thorough and no more severe than the alveolar.]

Department of Nervous and Mental Diseases.

In charge of Dr. P. E. Archinard and Dr. Roy M. Van Wart, New Orleans

OBSERVATIONS ON THE TREATMENT OF GENERAL PARALYSIS AND TABES DORSALIS BY VACCINES AND ANTI-SERA (Robertson and M'Rae, *Review of Neurology and Psychiatry*, September, 1907).—The writers, after conducting a series of experiments with a vaccine prepared by heating a weighed quantity of the bacillus paralyticus suspended in sterile salt solution to 60° C. for fifteen minutes, conclude that repeated vaccinations might prove a useful mode of treatment. In their opinion, it should be carried out under the following three conditions: (1) The bacillus ought to be isolated from the patient; (2) There should be evidence that it is exercising a pathogenic action upon the patient; and (3) The injections should be carried out under the guidance of the leucocyte count or the opsonic index.

The serum was prepared by injecting the dead cultures of the same organism into sheep. They conclude that—

1. The anti-sera with which we have been working produce reactions which are diagnostic of general paralysis or tabes dorsalis; they are probably due to the liberation of endo-toxins.

2. Cases of these diseases treated with the sera in most instances undergo improvement.

3. A polyvalent anti-bacterial serum is likely to be more efficacious than either the mono or bivalent serum we have hitherto used.

(Note.—The etiological relationship of the bacillus paralyticus to general paralysis is not as yet generally accepted.)

PSYCHO-EPILEPSY.—Gowers (*Review of Neurology and Psychiatry*, July, 1907) calls attention to a peculiar feeling of fear, often

intense, which is sometimes the aura of an epileptic attack. Though this may, when followed by a brief loss of consciousness, form a minor attack, it is not met with as an isolated symptom in ordinary epilepsy. In some patients this may be replaced by a feeling of distress. In both forms it begins and ends suddenly, and its duration may be longer than it is in cases of epilepsy.

A woman of 63, asking advice for another condition, had for fifteen years suffered from attacks of depression of sudden onset and lasting as long as five minutes and ending as suddenly as they commenced.

A man aged 65 had for two years suffered from sudden attacks of vague head, lasting for a few seconds.

A third case—a man aged 28—had for six years suffered from minor epilepsy. For two years he suffered from another quite distinct form of attacks. About once a month his mind would suddenly become inactive and he could not be aroused to work. A night sleep always relieved him. During this state he could not concentrate or follow an argument.

THE SYMPTOMS DUE TO PERIPHERAL NEURITIS, OR SPINAL LESIONS IN DIABETES MELLITUS (Williamson, *ibid.*).—Eight clinical forms are described, and the chief symptoms are summarized as follows:

1. Subjective symptoms: Pain and burning sensation; tenderness and hyperesthesia of skin and muscles.
2. Loss of vibrating sensation in the feet or feet and legs.
3. Loss of tendo-Achilles reflex; the knee jerks being present in some cases; lost in others.

These symptoms are also seen in tabes, but the examination of the urine usually served to distinguish the conditions.

The same are usually dull and aching in character, but may be sharp and stabbing, as in tabes. Optic atrophy, Argyll-Robertson pupil, visceral crises and bladder symptoms occur in tabes, but not in the diabetic condition.

These symptoms are due to degenerative changes in the peripheral nerves and posterior column of the cord.

A CASE OF NEUROLEPSY (*Ibid.*, August, 1907).—Gowers observed a girl who had suffered from the age of 16 from peculiarly

brief attacks of sleep. The attacks occurred on one to three successive days, then one or two months passed before there were others. The attacks commenced suddenly with yawning and heaviness of the eyes. In a few minutes she was asleep and dreaming. Often she would talk during the sleep and arouse herself by so doing. The attacks seldom lasted over five minutes, but if she resisted they lasted longer, from ten to fifteen minutes.

The article contains brief reference to similar cases and emphasizes the necessity of distinguishing these attacks from minor epilepsy.

Louisiana State Medical Society Notes.

In Charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

IMPORTANT NOTICE.

CHAIRMEN OF SECTIONS ARE REQUESTED TO SEND THE TITLES OF SECTIONS AND ALSO THE NAMES OF THE PHYSICIANS WHO ARE TO OPEN DISCUSSION.

SPECIAL NOTICE—ARRANGEMENT OF PROGRAM.—The committee appointed by the outgoing President of the Louisiana State Medical Society to consider the best arrangements for the conduct of the annual meeting of the society makes the following preliminary report and wishes to call your attention, firstly, to the considerations which have led them to offer these suggestions; and, secondly, to the plan recommended.

Judging from the experience of the last two or three meetings, it is probable that for the next meeting sixty or more titles of papers will be handed in by various members of the society. In a meeting of three days' duration, and one, where the evening sessions are devoted to special programs, such as the President's Address, Annual Oration, papers by invited guests, and entertainment, the total time available for transaction of business and reading and discussion of scientific papers, is only twenty-one hours, even though the afternoon sessions be prolonged until 6 o'clock. Of this time business meetings absorb from five to six hours, leaving only fifteen or sixteen hours for the scientific program.

With a program of about sixty papers, this means only fifteen minutes for the reading and discussion of each paper. The committee has considered the advisability of recommending the division of the society into one or more sections and the simultaneous holding of separate meetings of such sections, but does not believe that the society would favor so radical a change at this time. It would, however, request the members of the society to come prepared to discuss such division.

RECOMMENDATIONS.

1. Using the number of papers on last year's program as a basis of calculation, the committee recommends the allotment to each section of a fixed period of time for the reading and discussion of the papers belonging therein.

2. That the papers in each section shall be read in the order in which the titles are sent to the COMMITTEE ON SCIENTIFIC WORK, except that, as in the past, the chairman's paper shall be read first, and that, when several papers of closely related import are announced, they shall be grouped together on the program in order that they may all be discussed together.

3. That the time allowed for the reading of a paper shall not exceed ten minutes, and that in discussion speakers be limited to three minutes.

4. Readers of papers are urged to prepare abstracts of their complete papers for reading at the meeting, handing in the complete papers for publication.

5. If, in any section, the number of papers be so great as to prevent all being read, the papers not read may be read by title or else go to the foot of the program to be read at any later time not otherwise occupied.

Your attention is especially directed to Recommendation 3, limiting the time for reading of a paper to ten minutes; to No. 4, urging the preparation of abstracts for reading, and to No. 2, dealing with the order in which papers will be read.

The committee also requests from you at the present time an expression of opinion as to the advisability of dividing the society at the meeting of 1909 into a section on internal medicine and a sec-

tion on surgery, these two sections to meet jointly mornings and evenings, and separately each afternoon.

N. B.—IF YOU WANT TO READ YOUR PAPER SEND THE TITLE IN now to the Chairman of the Committee on Scientific Work, 141 Elk Place, New Orleans, La.

If you wait until January or February it will probably be crowded out because of length of program.

As the *ten minute rule* will be STRICTLY ENFORCED, the committee suggests that, in case your paper is too long to be read in this time, you prepare an abstract to be read and hand in the complete paper for publication.

Respectfully submitted,

J. T. HALSEY, Chairman,

C. JEFF MILLER,

P. L. THIBAUT,

E. O. TRAHAN,

F. H. WATSON,

Committee.

Medical News Items.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION WILL MEET at the St. Charles Hotel, New Orleans, December 17, 18 and 19, 1907. A preliminary program has been issued presenting a large number of papers with remarkable names. Among the contributors we note the local names of Drs. C. Jeff Miller, R. Matas, J. D. Bloom and E. Denegre Martin.

The railroads have declared a return rate of one and one-third fare, on the certificate plan, and special rates have been arranged at the headquarters of the meeting, which will be the St. Charles Hotel.

TRI-STATE MEDICOS ADJOURN. The twenty-fourth annual meeting of the Tri-State Medical Association, comprising the States of Tennessee, Arkansas and Mississippi, which convened at Memphis on the 19th of November, came to a close on the 21st. The following officers were elected: President, Dr. Eugene Johnson, Yazoo City, Miss.; Secretary, Dr. Richmond McKinney, Memphis, Tenn.; Treasurer, Dr. Marcus Haase, Memphis, Tenn.

THE INSTITUTE OF DENTAL PEDAGOGICS will hold its next meeting in New Orleans on December 31, 1907, January 1 and 2, 1908. The local committee consists of Drs. L. D. Archinard, Chairman; V. K. Irion and H. P. Magruder.

This is the most representative body of Dental teachers in the United States, and the outlook for an interesting meeting is very propitious.

THE INTERNATIONAL CONGRESS OF TUBERCULOSIS is announced to take place in Washington from September 21 to October 12, 1908. The Committee of Arrangements, under the Chairmanship of Dr. Lawrence F. Flick, of Philadelphia, met recently in New York. Incident to the progress related, the Committee announces that several distinguished foreigners have consented to participate in the program, Great Britain, Holland, Switzerland, Germany, France and Japan, so far, being among those to be represented. The governors of twenty-three States have officially encouraged the congress, and state committees have been appointed. Altogether the congress promises to be a success.

THE AMERICAN PHARMACEUTICAL ASSOCIATION, at its recent annual meeting, directed the distribution of a set of resolutions aimed at establishing the Pharmacopeia as a standard book of reference, and as a text-book in medical colleges. The resolution covered several notable points, each of which is sufficiently important to demand the attention of the profession and medical teachers.

THE TEXAS STATE MEDICAL EXAMINING BOARD. This board has adopted definite actions regarding regulations for medical colleges and for reciprocity. Entrance to Texas medical colleges will hereafter be based on the same medical requirements as entrance to the University of Texas; i. e., matriculate must have a preliminary education equal to that given by a Texas high school of the first class; in addition, medical schools in Texas, to be considered reputable, must admit only matriculates having entrance certificates issued by the State Board of Medical Examiners. To this end the Board, or its agents, will hold entrance examinations for admission to medical schools, beginning with the fall session of 1908. The Board favors extending reciprocity to States having

equal requirements as Texas. It will recognize only certificates obtained from the Boards of such States on examination. Other States, with satisfactory requirements, however, are not recognized, as they themselves make no reciprocity arrangements.

MEETING OF THE TRI-STATE MEDICAL SOCIETY—ARKANSAS, LOUISIANA AND TEXAS. This Society held a very successful session at Shreveport on November 13, 1907. About one hundred physicians, representatives from the three States, were in attendance, and a number of new members were added to the roll. Quite a number of interesting papers and discussions occupied most of the time of the meeting.

The visiting members were entertained at a buffet luncheon at the Northwest Louisiana Sanitarium. Drs. Louis Abramson and E. Hans, and their charming wives, were the hosts.

After a short and busy session in the evening, the local profession tendered the visitors a reception and dance at the Caddo Hotel.

The day after the meeting a number of interesting clinics were held by the Shreveport surgeons, and a number of visitors remained over to attend them.

After much discussion, the time of meeting was left unchanged, and the next annual meeting will be held on the second Wednesday of November, 1908, at Texarkana, Texas.

The following officers were elected for the coming year: Dr. C. A. Smith, Texarkana, President; Dr. K. H. Blackman, Ruston, Vice-President for Louisiana; Dr. G. H. Moody, San Antonio, Vice-President for Texas; and Dr. A. U. Williams, Vice-President for Arkansas.

PLAGUE IN SAN FRANCISCO. According to recent announcements made by the officials of the Marine Hospital Service, the plague situation in San Francisco is very little improved. Dr. Rupert Blue, of the Public Health and Marine Hospital Service, is now in charge of the situation. The Board of Health has been reorganized with Dr. William Ophuls as President, and is now proceeding to take drastic measures by the establishment of hospitals, both city and county, to suppress the plague. The sum of \$10,-

000 has been promised by the City Council of Oakland as a monthly expenditure to prevent the spread of the disease. The efforts at rat extermination with phosphorus paste and flour, are beginning to show good results.

CHOLERA IN THE EAST. Cholera is reported on the increase in the East; Japan and Russia are said to be suffering from this disease more than the other countries.

NEW COLLEGE MERGER AT LOUISVILLE. The merger between the Louisville Medical College and the Hospital College of Medicine has finally been completed and the college will henceforth be known as the Louisville and Hospital Medical College, and will be the medical department of Central University. The officers of the new college are as follows: Dr. L. S. McMurtry, President; Dr. C. W. Kelly, Dean; Drs. H. B. Ritter and H. H. Grant, Regents; Dr. Irving Abell, Secretary of the faculty.

A TEXAS TUBERCULOSIS COLONY. According to *Charities*, the Jews of Texas are considering a project proposed by Mr. A. Guggenheim, of San Antonio, for the purchase of a tract of land in that State, to be used as a tent city for tuberculosis patients. The plan also includes the establishment of a poultry and truck farm, upon which the patients may be employed while living with their families under canvas. It is expected that the farm can be made self-supporting. The main obstacle in the way is the State quarantine against tuberculosis, which Mr. Guggenheim is attempting to have raised for the benefit of his proposed colony.—*Exch.*

CHICAGO SCHOOL CHILDREN INSPECTED. According to the weekly bulletin of the Chicago Health Department, 17,820 children were examined during the first twenty schooldays by the medical inspectors of the health department, and of this number 1,476, or 8.3 per cent., were excluded from attendance at school on account of the existence of the following contagious disease: Tonsilitis, 315; pediculosis, 378; impetigo contagiosa, 188; scarlet fever, 120; scabies, 99; diphtheria, 84; whooping-cough, 66; purulent sore eyes, 45; measles, 42; mumps, 40; chickenpox, 32, and tuberculosis, 3. Of the 456 exclusions during the week 105 were afflicted with tonsilitis. Microscopic examination of cultures from 66 of these cases showed 7 of them to be diphtheria.

THE RUSSELL SAGE INSTITUTE OF PATHOLOGY. On November 1, 1907, a certificate of incorporation for this institute was filed with the Secretary of State at Albany. Its objects are stated to be the encouragement of scientific research in medicine and pathology, the investigation of disease and the maintenance of laboratories.

CANCER INCREASING IN THIS STATE. According to the monthly bulletin of the State Board of Health, deaths from cancer show no signs of decreasing. In September, 1907, 572 deaths from this cause were reported, as against 526 for the same month last year, and an average of 456 for the past five years. The tuberculosis mortality is said to be practically stationary.

REGISTERED BY NEW YORK DEPARTMENT OF EDUCATION. This Department has registered in *Group One* only five of the twenty-nine medical colleges in the Southern states. This means that in the judgment of the Department only five are conducted on approved lines in all respects.

NEW OFFICERS FOR ATLANTA BOARD OF HEALTH. The Atlanta Board of Health has elected Mr. G. H. Brandon to succeed Dr. C. F. Benson as President of the Board; Dr. Benson having recently resigned. Dr. C. W. Strickler was elected Vice-President in place of Mr. Brandon. Dr. W. B. Armstrong was elected to succeed Dr. Benson as a member from the second ward.

NEW HOSPITAL FOR CONSUMPTIVES. A hospital for consumptives is to be built at the Tennessee State penitentiary, where there are said to be present forty-five patients afflicted with the disease.

INDIANA UNIVERSITY SCHOOL OF MEDICINE. The Indiana University and the State College of Physicians and Surgeons, Indianapolis, on account of affiliation, have dropped these names, and that of the Indiana University School of Medicine has been substituted.

FREE ANTITOXIN. Illinois has appropriated \$15,000.00 for free antitoxin, and there are 105 stations in the state for free distribution.

CHANGE OF LOCATION. The *Texas Medical News* has changed its location from Austin to Dallas, Texas.

TO FURNISH LABORATORY. Major W. S. Ingram, Secretary of the Louisiana State Board of Health, has let contracts for the furnishing of the laboratory which will be established by the State Board in the Perrin Building, where the Board has its offices. The laboratory will be established within the next few weeks.

PHARMACISTS EXAMINED. The Louisiana State Board of Pharmacy has announced the result of the examination held on November 2, 1907. The examining Committee was composed of William M. Levy, Chairman; Adam Wirth, C. D. Sauvinet and F. C. Godbold, Secretary. Out of fourteen applicants ten passed the examination. Those securing certificates as registered pharmacists were as follows: F. P. Blanchard of New Orleans, C. W. Davison of Franklin, H. Lichtenfield of New Orleans, N. S. Ward of Jennings, A. C. Flache of New Orleans and B. K. Parish of Leesville. Those given certificates as qualified assistants were J. Sigur of Franklin, La.; B. N. Walker of Columbus, Miss., and J. Bonee of New Orleans.

PERSONALS: Dr. Arthur I. Weil has removed from New York, to New Orleans. The Doctor will limit his practice to Diseases of the Eye, Ear, Nose and Throat.

Dr. Marion Souchon has been elected House Surgeon of the Hotel Dieu to succeed Dr. Hampden Lewis, resigned.

Dr. H. A. Veazie and Dr. J. Hope Lamb, acting assistant surgeons of the United States Public Health and Marine Hospital Service at this point, have been reappointed.

Dr. O. Joachim gave the Anti-Tuberculosis League a description of a model German sanatorium, with its method of treatment of tuberculosis, which he visited this past summer.

Dr. William Kohlman and Dr. E. W. Jones have returned from a trip to Europe.

Dr. A. W. DeRoaldes was honored while abroad during the past summer by being presented with the cross of commander of the order of St. Gregory the Great.

Among the visiting doctors the past month were Dr. W. M. Brumby, State Health Officer of Texas, Dr. J. J. Ayo, of Bowie, La., and Dr. F. R. Tolson, of Lafayette, La.

Among the doctors who changed locations last month were Dr. H. C. Milburn, who moved from Whiteville to Winnfield, La., and Dr. T. M. Butler, from Summerville to Trout, La. Dr. L. R. Young has gone from Abeyille to Rayne, La.

Several of the New Orleans men attended the Tri-State Medical Society at Shreveport last month; among these we mention Dr. L. G. LeBeuf, E. Denegre Martin, W. M. Perkins and J. T. Halsey.

MARRIED: Dr. Alexander Ledoux and Miss Inez Pitard, Tuesday, November 12.

DIED: Surgeon John Godfrey, of the United States Public Health and Marine Hospital, died at Detroit, Michigan, on October 16, 1907. Dr. Godfrey was stationed for a number of years in New Orleans and numbered many of the older members of the profession among his friends.

Dr. Adrien Doyon died September 21, 1907, at Uriage, France. Dr. Doyon leaves behind him a distinguished reputation as one of the most notable dermatologists of his day. Among the founders of the *Annales de Dermatologie*, he helped much to make the French school distinguished. Dr. Doyon was eighty years old at the time of his death.

Dr. Warren H. Crane died November 14, 1907, aged 30 years, at Vernado, La.

Dr. Campbell C. Fite died in New York City on November 9, 1907 at the age of 51.

Mrs. Jeanie Mort Walker, who was well known in New Orleans for her earlier literary efforts and as an authority on dentistry, died on November 14, 1907. Mrs. Walker was an honorary member of the State Dental Associations of Mississippi, Alabama and Georgia, as well as of the Southern Dental Association.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

A Practitioner's Handbook of Materia Medica and Therapeutics, Based Upon Established Physiological Action and the Indications in Small Doses. By THOS. S. BLAIR, M. D. The Medical Council, Philadelphia, 1907.

The author dedicates this small volume to the optimist in therapeutics, and it is timely in this day of christian science, too much psycho-therapeutics and therapeutic nihilism.

In a practical way the author has attempted to record investigations of all schools of practice bearing upon the clinical use of small doses of drugs. He has avoided the consideration of infinitesimal doses and only busies himself with sane therapeutics.

The author says: "The question of the natural limitations of the *small* dose is quite as important as is that of the large dose. It is to be hoped that all physicians who employ remedies for their actions in small doses may never be so attracted by the arguments in favor of such procedure as to neglect the rational and eminently necessary use of the large doses when they are indicated."

This book will prove of benefit to every student of non-sectarian medicine.

STORCK.

A Pocket Formulary. By E. QUINN THORNTON, M. D. New (eighth) Edition, Revised. Lea Brothers & Co., Philadelphia.

That this pocket formulary has proved popular is attested by this, its eighth, edition.

STORCK.

Alcohol. The Sanction for Its Use. Scientifically Established and Popularly Expounded by a Physiologist. Translated from the German of DR. J. STARKE. G. P. Putnam's Son, New York.

The author is a champion for the use of alcohol in moderation, and he goes to the extreme in trying to prove its beneficial effects. While his statements are at times far-fetched, in the main his conclusions are correct and are in harmony with what unprejudiced practitioners know to be true. Starke's book must be very disquieting to the physiologist, Dr. Winfield S. Hall, who contends that alcohol is not a food, and who further claims that it "is toxic to the protoplasm of all higher plans". Against he first of Hall's contention, we have the authority of Atwater that alcohol is a food; and further, Benedict and Torok have proven its value as a food for diabetics. Against the second contention, we have the statement of no less an authority than Professor J. Reynolds Green, sometime president of the Botanical Section of the British Association, that numerous plants can be fed on alcohol. Green has also shown that plant cells take into their protoplasm the sugar molecule unchanged, and that the subsequent changes make it quite probable that it is fermented by an enzyme into alcohol and carbonic acid.

While we think Dr. Starke has in some respects overshot the mark in his advocacy of the use of alcohol, we consider his book a distinct contribution to the literature on the subject.

STORCK.

A Treatise on the Principles and Practice of Medicine. By ARTHUR R. EDWARDS, A. M., M. D. Lea Brothers and Co., Philadelphia, 1907.

The book here reviewed has much to commend it to the conservative practitioner.

Modern medicine has in Dr. Edwards an active exponent, and one who has not lost sight of the fact that the most important function of the physician is to alleviate and cure his patients, not merely to make a diagnosis and then await the death of his patient to confirm the diagnosis. The work is eminently practical and will be found helpful to the practitioner.

The large number of tables giving the differential diagnosis of diseases likely to be confused is of considerable value.

When possible, and when it does not interfere with the scope of the work, Dr. Edwards has given the surgical indications of diseases.

We think that this work will take rank with the best single volume treatises on the practice of medicine.

STORCK.

Diseases of the Lungs. By ROBERT H. BABCOCK, M. D. D. Appleton & Co., New York and London, 1907.

This is the first edition of Robert H. Babcock's work on diseases of the lungs, designed to be a practical presentation of the subject for the use of students and practitioners of medicine. The twelve colored plates and one hundred and four text illustrations in the book add very much to its practical value. The diverse diseases of the bronchi, lungs and pleura are carefully presented in three separate sections, pneumonia and pulmonary tuberculosis receiving particular attention. The most modern methods of treatment are given, hydrotherapeutic applications, open air and use of tuberculin. To give an idea of the value of the illustrations, we cite figure 4, giving the Priessnitz cross bandage applied, and figure 101, giving the method of application of adhesive straps in pleuritis.

E. M. D.

Physical Diagnosis. By HOWARD S. ANDERS, M. D. D. Appleton & Co., New York and London, 1907.

Among the many books on the subject, the one before us should be commended for the spirit of the teaching, in addition to the information on the matter. The author insists on the intrinsic importance of two things, namely, technic and reason. Emphasis is placed upon technical practice and precision and inculcation of the inductive habit of thinking. Case examples of the inductive method are given next to a wealth of illustrations and plates. A good book to learn how to perceive and analyze the physical signs and objective symptoms and check the habit of over scrutinizing the chemical and microscopical aspects of secretions and excretions.

E. M. D.

Publications Received.

C. V. MOSBY MEDICAL BOOK AND PUBLISHING CO., St. Louis, 1907.

The Diagnosis and Treatment of Diseases of Women, by Harry Sturges Crossen, M. D.

P. BLAKISTON'S SON & CO., Philadelphia, 1907.

Manual of Physiological and Clinical Chemistry, by Elias H. Bartley, B. S., M. D., Ph. G. Third Edition.

A Manual of Orthopedic Surgery, by Augustus Thorndike, M. D.

The development of the Human Body, by J. Playfair McMurrich, A. M. Ph. D. Third Edition.

LEA BROS. & CO., Philadelphia and New York, 1907.

Hand-Book of Cutaneous Therapeutics Including Sections on X-Ray, High Frequency Current and the Minor Surgery of the Skin, by W. A. Hardaway, M. D., LL. D., and Joseph Grindon Ph. B. M. D.

E. B. TREAT & CO., New York, 1907.

Clinical Treatises on the Symptomatology and Diagnosis of Disorders of Respiration and Circulation, by Prof. Edmund von Neusser. Authorized translation by Andrew MacFarlane, M. D. Part I, *Dyspnoea and Cyanosis*.

F. A. DAVIS CO., Philadelphia, 1907.

A Text-Book of Physiology, by Isaac Ott, A. M., M. D.

The Internal Secretions and the Principles of Medicine by Charles E. Sajous, M. D.

Merck's 1907 Index.

MISCELLANEOUS.

Transactions of the Mississippi State Medical Association (40th Annual Session). (Mississippi Printing Co., Vicksburg, 1907.)

Constitution and By-Laws of the Medical Society of New Jersey, Adopted 1903 with Amendments to 1907. (Orange Chronicle Co., Orange, N. J., 1907.)

G. Merck's Annual Reports; Complete Series, Volume XX, 1906. (Darmstadt, May, 1907.)

Transactions of the American Otological Society; 40th Annual Meeting. Volume X Part III. (Mercury Publishing Co., Printers, New Bedford, Mass. 1907.)

American Oncologic Hospital for the Treatment of Cancer and Other Tumors; Second Annual Report for the Year ending December 31, 1906.

Annual Report of the Department of Health of the City of Chicago for the year 1906. (Charles J. Whalen, M. D., Commissioner of Health, Chicago, 1907.)

Game Laws for 1907. U. S. Department of Agriculture. Farmers' Bulletin 308. Government Printing Office, Washington, 1907.)

Perpetual Visiting and Pocket Reference Book. (J. H. Chambers & Co., St. Louis, Mo., 1907.)

Reprints.

A Brief Sketch of One of Baltimore's Greatest Men, Horatio Gates Jameson, M. D., by Henry O. Marcy, A. M. M. D. LL. D.

The "Open Method" Treatment of Cancer, by W. D. Witherbee, M. D.

The Opsonic Index in Diabetes Mellitus, by John C. DaCosta, Jr., M. D.

Quinine. Its Therapeutic Possibilities, by H. L. Sutherland, M. D.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.

FOR OCTOBER, 1907.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	11	3	14
Intermittent Fever (Malarial Cachexia)		1	1
Smallpox.....			
Measles.....			
Scarlet Fever.....	1		1
Whooping Cough.....	2		2
Diphtheria and Croup.....	3	1	4
Influenza.....	1	2	3
Cholera Nostras.....			
Pyemia and Septicemia.....	2		2
Tuberculosis.....	51	42	93
Cancer.....	19	10	29
Rheumatism and Gout.....	2	1	3
Diabetes.....	2	1	3
Alcoholism.....	1	1	2
Encephalitis and Meningitis.....	2	3	5
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	12	6	18
Paralysis.....	5	2	7
Convulsions of Infants.....	1		1
Other Diseases of Infancy.....	21	12	33
Tetanus.....	3	8	11
Other Nervous Diseases.....			
Heart Diseases.....	32	34	66
Bronchitis.....	2	6	8
Pneumonia and Broncho-Pneumonia.....	19	17	36
Other Respiratory Diseases.....		4	4
Ulcer of Stomach.....			
Other Diseases of the Stomach.....	4	6	10
Diarrhea, Dysentery and Enteritis.....	17	11	28
Hernia, Intestinal Obstruction.....	3	2	5
Cirrhosis of Liver.....	4	2	6
Other Diseases of the Liver.....	2	2	4
Simple Peritonitis.....			
Appendicitis.....	4		4
Bright's Disease.....	27	26	53
Other Genito-Urinary Diseases.....		4	4
Puerperal Diseases.....	9	2	11
Senile Debility.....	14	12	26
Suicide.....	6	1	7
Injuries.....	33	27	60
All Other Causes.....	9		9
TOTAL.....	324	249	573

Still-born Children—White, 20; colored, 23; total, 43.

Population of City (estimated)—White, 251,000; colored, 90,000; total, 341,000.

Death Rate per 1000 per annum for Month—White, 15.49; colored, 33.20; total, 20.16.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 30.09
Mean temperature 71.
Total precipitation 1.61 inches.
Prevailing direction of wind, northeast.

*Paullum sepulchre distat inferie
Celata virtus. — HORACE.*

New Orleans Medical and Surgical

Journal

ESTABLISHED IN 1844.

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Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a WRITTEN order for the same accompany the paper.)

The Rewards of Medicine as a Profession.*

By A. L. METZ, M. Ph., M. D., Professor of Chemistry, Medical Department,
Tulane University, New Orleans, La.

Gentlemen of the Medical Class: On behalf of the Faculty of the Medical Department of the Tulane University of Louisiana, it is my pleasant duty to greet you and extend to you a sincere and hearty welcome. Be assured that this is not a formal greeting of lip service, but a sincere tender of salutation and hospitality from the gentlemen who compose the teaching staff of this department of the University to the representatives of the young manhood of our dear Southland, who are entering upon a profession which comes nearer to the home and the fireside, to the sorrows and the inner life of the people than any other of the learned professions.

This occasion is one of considerable interest to all concerned. You may, even now, you certainly will in after days, look upon it as

*Opening Lecture; Session 1907-1908, Medical Department, Tulane University.

an epoch in your lives. It is the final committal of yourselves to the study of a profession which is to be the occupation of your lives, and which is to give shape to your destiny. Whatever hesitation or doubts about giving yourself up to medicine as a study may have hitherto unsettled your purpose for the moment, you have now given evidence that your mind is finally made up. You have "put your hand to the plow," and it will be expected of you that you "look not back." You have fairly mounted the threshold of the temple and will be eagerly seeking to have its mysteries unveiled to you. But, remember, whatever progress you may make in its outer courts, days and nights of wearisome toil and labor must pass before you can be admitted to its inner sanctuary.

Standing as you do in this interesting position, it is highly desirable that you should have a correct estimate of the scope, bearing and tendency of the profession; what its legitimate fruits are; what may be accomplished by it; and what not. However desirable such knowledge may be to you, the theme would be too comprehensive for this occasion. I will, however, call your attention in a cursory way to some of the rewards of medicine as a profession.

If we come fairly up to the subject and strip it of all extrinsic dress, we shall find, that the leading question among men in determining upon an occupation or pursuit, is the pecuniary remuneration which they expect. Indeed, the love of gain is the great ruling principle among men. There is, perhaps, on the whole, no passion which exercises so controlling an influence over the conduct of men. With an exception here and there, which serves only to establish the rule, it governs the high more than the low, the rich more than the poor, the old more than the young. It is true that it is a passion which is not apt to be developed in its full force very early in life; but it is one which is strengthened with age, and is among the last to be extinguished. It is well if, fostered by success, it does not degenerate into miserly avarice in old age.

Love of gain is the moving principle in the acquisition of wealth, and, when legitimately exercised, is a laudable passion. It is only when it is perverted or becomes pathological, and leads to the contemplation of wealth as the ultimate end, instead of the means, that it degenerates into a vicious and loathsome passion.

There is a prevalent opinion that the compensation of professional men generally is large for the amount of labor performed. And doubtless the young aspirant for professional honors and emoluments is captivated by the glowing picture of golden fruits, which his warm imagination depicts. They and the public are led to regard the matter in this light, by comparing professional labor with that of other classes of men. It is an unjust comparison. The circumstances attending the two classes of labor are altogether different; and it is impossible to do justice in judging them by the same standard. The reasons are, first: for the minister, lawyer, physician, pharmacist, engineer and the other learned professions, a long course of study is necessary to fit these for the practical duties of a vocation, involving a large outlay of money, time and labor, which is not true of other pursuits.

Secondly: A young professional man has always to undergo a more or less protracted period of probation before he acquires a business adequate to his support. That, also, is not true in other pursuits.

Thirdly: Professional labor is essentially different in its character from that of the other classes to which I have referred. It is peculiarly intellectual and its value cannot be judged by the same standard as that which is mixed in character, or even mostly manual. Being, as it is, essentially intellectual, it follows that a better order of intellect is required for it than for the other pursuits, which are manual or mixed. This position, I think, will hardly be controverted. I do not, however, mean to be understood as affirming that because a man is a professional man he is, therefore, of a better order of intellect. Nothing could be further from my purpose; for I am well aware that,

“ * * * not more dullness lies

In folly's cap, than wisdom's grave disguise.”

I do mean to affirm that they ought to be men of a higher cast of intellect than is required for most other occupations. I will further affirm that as high intellectual endowments are required for medicine as for any other learned professions, and perhaps a more varied learning.

Fourthly: A higher reason why the value of professional labor cannot, with justice, be estimated by the same standard as the other

pursuits of men, is, the character of the responsibility which attends it. This is an element which it is impossible to estimate with precision. It varies infinitely; but it is ever present, and must always be considered. In law and medicine, it is of a two-fold character, pecuniary and moral. The lawyer who glaringly neglects or mismanages his client's cause, to the extent of subjecting him to serious injury, is answerable in damages; the physician, by whose negligence or ignorance a patient suffers serious evils, is liable for damages in a suit for malpractice.

Serious as this pecuniary responsibility is, it is as nothing with a conscientious man, when compared with the moral responsibility which he feels. The lawyer, who undertakes the management of a cause for his client, involving his estate, should and does feel the weight of this responsibility, if he is a right minded man. When an innocent man is put upon trial, charged with a high crime, and his life, or reputation is in jeopardy, the advocate who interposes to protect him, and does not pass anxious moments and perhaps sleepless nights in deliberation on the best means of rescuing his client from his impending fate, is destitute of those finer qualities of the man which should enter as a component element in every one who assumes such important functions as he undertakes to perform. The physician who does not appreciate his responsibility, when pain and suffering, and it may be, life or death depend on his care or skill, must be made of sterner stuff than honest men require; and he who can undertake grave surgical operations, where, perhaps, he has to plunge his knife into the midst of vital parts, so that a cut here or one there, deviating a quarter of an inch from the right place would destroy the life of his patient,—I say, he who can undertake such duties as these, without a strong sense of his social and moral responsibility, thinking only of the reputation or money he is to gain, is a monster in human form.

Again, not only is it erroneous to suppose that the compensation of professional labor is high, but results show that medicine, while it generally gives to its faithful laborers a competency, seldom rewards even its most zealous votaries with fortune. I allude now to the results of professional labor, strictly speaking. There is scarcely any pursuit in life that will more certainly yield a competency than the practice of medicine, diligently pursued; and

with less risk, pecuniarily speaking. If the gains of the physician be never so large as those of the merchant, his risk is also less. But he must content himself with mediocrity in fortune. Without a feeling that would seek to cast a shadow upon the sunny happiness of any who have honestly won the smiles of fortune, he must leave to others the gratifications derived from the splendor of wealth, her gorgeous equipages and palatial establishments, and find his enjoyments in the high pleasures of the pursuits of science. His reward is of a different and far higher character than that of mere wealth.

In law, the results are very similar to those of medicine. The lawyer who brings education and talents to his profession and devotes himself with assiduity and zeal to its pursuit, will generally secure for himself and his family a good living; in some cases a moderate independence; and in very rare instances, (which stand only as exceptions to the rule) even large fortunes have been made by strictly professional labor. But the rule stands good here, as in medicine, that professional labor alone, by however much ability and faithfulness it may be marked, yields at best but a moderate independence. It is only when the lawyer loses that high professional pride which values dignity more than gold, and degenerates into a mere trading lawyer, that he makes a fortune.

With the ministry the results are somewhat analogous, but still quite different. It is rare indeed, but yet does sometimes happen, that a minister makes more than a plain living; but he rarely, if ever, makes even a moderate fortune. Yet as a class, they are the richest and poorest of all professional men—poorest in the facts that I have just stated as to the result of their professional labor, and richest in the facts that “he that ministers at the altar shall live by the things of the altar.”

The clergy are, I believe, less obnoxious as to the charge of using their profession improperly as a means of money-making than the members of the other professions. It is hardly to be expected that you would often find a man whose business it is to teach high moral principles and pure religious precepts, who would degrade such a calling to mere money-making. Though such a case as this rarely happens, yet their skirts are not wholly clear on this point. Cases undoubtedly occur where a loud “call” induces a preacher to

think that the field of labor is a larger one than that in which he has been engaged, and that providence designs him for the work. Still other cases do undoubtedly occur, where the sacred robes are assumed for venal purposes; but this is not the fault of the profession any more than it is the fault of law or medicine that groveling or corrupt men are found in their ranks.

Medicine has her votaries, who love her science and are proud of her noble benevolence; and she has her charlatans, who would sell her birth-right for "a mess of pottage."

Law has her lofty jurists, who find pleasure in the pure waters of ethics, and who scorn to compromise their noble calling for mere gain; and she also has her miserable crew of pettifoggers, who would torture truth to give it the appearance of falsehood, clothe right in the shocking habilaments of injustice, and rob innocence of bread and fair name, all for a bribe.

The ministry has her grave theologians and pure minded divines, who have an eye single to the sacred character of their work, and it can boast its long list of martyrs who have died for principle; but she sometimes finds in her ranks men who will huckster their hypocritical cant for the highest price the market affords.

Among other rewards of medicine, let me speak, first, of the social position and influence of the physician. What is it? I shall of course use the term "social" in its broadest and largest sense. In answering this question, it would be highly interesting and instructive also, to examine it historically and in detail; but this is impossible within the limits of this occasion. I cannot refrain, however, from taking a rapid glance at this aspect of the subject. In doing so, it will be quite sufficient to ascertain the estimate put upon medicine in the different periods of its history, and by the classes of persons who have engaged in its practice.

In pursuing this subject we might go back to the very origin of society, when men were in wandering tribes (for example, among the ancient Egyptians, the Chaldeans, and the Chinese,) and we would find knowledge of all kinds mainly in the hands of the chiefs, who were at the same time priests and physicians. This union, however, of the priesthood and the practice of medicine, showing the high estimate in which medicine was held, was by no means limited to those primeval times, for long after nations were organ-

ized, and commerce had begun its work of civilization, and cities were built, we still find the same alliance. In the days of Moses, the priests, a numerous and influential body of men, who received one-tenth of the whole income of the nation for their support, practised medicine and all the other learned professions. Moses himself, reared in the court of Pharaoh and instructed in all the knowledge of the Egyptian priesthood, gave in the book of *Leviticus*, hygienic rules for the government of the Israelites in their journey back to the land of their fathers, which furnishes a monument to the state of medicine in that day, and gives us significant proof of the character of persons who were the depositories of our science.

The ancient Greeks, anterior to the Trojan war, some twelve hundred years before the Christian era, according to tradition and the fabulous accounts we have, associated the healing art as far as it was understood, with the most important concerns of life. To the gods was committed the holy task of healing the sick and the requirements of the oracles were as implicitly obeyed by those prostrated by disease, as they were reverently honored by the throngs who came to consult them in matters of religion, or of state. For a long period of seven hundred years, the nation (the Greeks), which ultimately became a luminous point from which were to radiate science, literature, and the arts through every civilized land, showed their veneration for medicine by continuing its practice in the temples of Esculapius. Doubtless the credulity of the people was often imposed upon by the priests who officiated in the temples. And whilst we are thus brought to an appreciation of the craft and cunning of the one and the ignorance of the other, the facts still show us in what awe and veneration those were held who were supposed to possess the power of healing.

When in the westward course of empire, Rome became the seat of power and the nursery of knowledge, many of the most distinguished men of the Grecian and Egyptian schools, following in the great current, took up their abode in Italy. "At first, however,"—says the historian—"the Romans betrayed an almost invincible aversion to medicine, nor was the feeling of dislike a vulgar prejudice which was confined to the lower orders of the poor, for no less a distinguished man than Cato, the Censor, dispensed with

professional assistance, during any sickness in his family, preferring to treat them according to the directions of a work in his possession which contained the necessary forms of prayers and incantations."

This contempt for medicine, however, by Cato (and which I here introduce as the exponent of the state of feeling among the Roman people at that time) is in part to be explained in another way than by supposing that he thus regarded the art itself. For, whilst many distinguished foreigners had gathered there, the physicians of Rome at that period were chiefly intriguing charlatans from Greece. There was both jealousy and contempt felt toward these aliens, who had come merely in quest of fortune. The Athenians, moreover, had been accustomed to regard all beyond the sphere of their influence as "outside barbarians." And Cato, in a letter to his son, expresses his suspicions of them by saying, "they (the Athenians) have sworn among themselves to kill all barbarians by means of medicine; and yet they require pay from those whom they treat, in order to gain their confidence, and thus ruin them the more easily."

But circumstances gave the opportunity to medicine to prove to the Romans its value. A violent epidemic broke out in their midst; great numbers became its victims, as it marched forward with a relentless hand in its work of destruction; and it baffled all their charms and incantations. In their extremity, they resorted to the temple of Esculapius at Epidaurus, and so propitious was their visit to the oracle that the plague shortly after subsided.

Grateful for the blessing they had received, they erected a temple to Esculapius; and from that day medicine made progress in Rome, and the practitioners of the healing art came ultimately to be held in high esteem. But having been long in the hands of aliens and slaves (for much of the practice was done by slaves), its progress toward elevation was slow, and it was not until about half of a century before the Christian era, that Julius Cesar, himself, guided by his own large views, which pointed out to him the importance of attracting men of science to the capital, by a decree, raised physicians to the privilege of citizenship.

When luxury and the vices which follow in its train had completed the preparation of Rome for its downfall, horde after horde

of northern barbarians swept over their land. And as the track of the tornado is shown by confusion and prostration, so here, society and civilization, embracing everything which that term includes in its largest sense, lay stunned and senseless. When a temporary resuscitation occurred, the governmental elements of that great empire, crazed and maddened by the blows they had received, turned upon one another, and the work was completed by a general disintegration.

A long series of centuries followed, of darkness, like the prolonged night of the Arctics, where the twilight, which plays around the horizon, serves only to tell that the sun is still there. In this long, gloomy period of the world's history, we find men, as suzerain and vassal, chiefly engaged either in predatory incursions into the territory of their neighbors, or else in defense of their own. Letters and science took refuge in the Church. Among the monks, the medical lore of Egypt, Arabia, Greece and Rome was centered, and the monasteries became the theater for medical practice and teaching.

The alliance of medicine and the priesthood, however, in the dark ages, is not to be taken as expressive of the estimate in which medicine was held. It grew out of the necessities of the times; in the fact that the nobles were too much occupied with their petty wars, and there was no other class possessed of sufficient intelligence to take the ranks of the professions. The clergy being the depositories and teachers of religion, literature, and science, nothing less than delusion could be expected from the burdensomeness of the work, even without the co-operation of any other cause. Consequently medicine degenerated greatly; and the knowledge of the priest-physicians, as well as of the few ignorant lay members, came to be limited almost to a very meager symptomatology and the possession of an incongruous mass of recipes. Still, we have no evidence that the clerical practitioners of the healing art suffered any degradation in their social position and influence, corresponding with the decline of science.

A particular branch of medicine, however, was held in great discredit. I refer to surgery. The clergy did not engage in surgery. There were two reasons for this. First, the general prejudice against the dissection of human bodies prevented their gaining that

anatomical knowledge which they knew to be necessary to the practice of surgery. Secondly, a canon of the Church prohibited them from drawing blood, under pain of excommunication. The consequence of this neglect by the clergy was, that the practice of the rude surgery of the times fell into the hands of barbers, bathers, and bonesetters. And they were held in such disrepute that no young man could even engage as an apprentice to a mechanic without first exhibiting a certificate to show that he was born of honest parents, and the issue of a family in which there were neither barbers, bath-keepers, nor butchers.

Still, notwithstanding medicine had degenerated in their hands, to the clergy of those times is due the credit of inaugurating those movements which resulted in bringing order out of chaos, and opening up for medicine, as well as for letters and the other sciences, a new and brilliant era. Medicine for some reason came to be declared by law to be incompatible with the sacerdotal office. And, with whatever purpose it may have been, the fact stands that, shortly after, certain schools were erected into universities, which combined, as at the present day, instruction in letters, theology, law and medicine. The best teachers were selected for the various departments. The personal association which the system brought about operated for their mutual instruction and the perfection of their teaching in their several branches; and the grand result was the rapid restoration of learning. The nations had emerged from feudalism, and, with the improved civil condition of the people, scholars breathed afresh the spirit of research; the medical science of ages back was exhumed, and her career came to be onward and upward to the present day.

I will not undertake to follow through the several centuries of resuscitation and improvement of medical science, to show its social position through that period. Suffice it to say, that celibacy ceased to be obligatory on physicians, because of the divorce by law of medicine from the clergy; and from that time forward practitioners of medicine acquired the same high social position that they hold at the present day. Surgery, too, was formally affianced to medicine by a recognition of equality by the medical faculty of France, in the beginning of the sixteenth century, when Ambrose Paré, a journeyman barber, made himself the first surgeon of the

age in which he lived, established firmly in the public mind the recognition of the equal dignity of his art with its sister science of medicine and conferred upon it lasting benefits by the improvements which he made in it.

In ordinary times, the physician moves about in the discharge of his duties quietly and unobserved except by those to whose ills he is ministering. He is a public man, it is true; and he is known to the public, yet his duties at such times are of a character not calculated to attract public attention. Nevertheless, if in his acquirements he fairly represents the state of the science of his profession, and if in his personal character he represents its dignity, he wins his way to the good opinion of the community in which he lives, and the most friendly attachment of those whose afflictions he is called to relieve. If he is the cultivated gentleman which his profession has the right to claim that he should be, he is an honored guest in every society where intelligence and refinement have sway. In his capacity of physician he is of necessity admitted to the most sacred family privacy. He sees families when prosperous and happy. Their condition is unveiled to him when adversity or affliction bear heavily upon them. And, if he possess the virtue of those French surgeons, who, in one of the revolutions of that people, sternly refused to give up to the police the names of the wounded patriots whom they attended, their secrets will be his secrets, and he becomes at once the friend and advisor of the family. It is not one family alone to which he stands thus related, but it is here and there throughout the community that he holds similar sacred relations, each regarding him as their own dear friend.

Whilst such is the silent and unseen consequence which attaches to a medical man in ordinary times, let pestilence come and begin its deadly work; then he becomes indeed a subject of public attention. The eyes of the community are turned to him as their refuge and shield. Let stern war unmask its grim visage, and a country call her sons to her defense; what will be their efficiency, unless the surgeon be skillful, intelligent and virtuous?

In America, it is true that men are not raised to honorary distinction by legislative enactment; but by the higher authority of universal consent the physician is the peer of the highest citizen of the land. He is his peer in position, in rank, in influence, in or-

dinary and extraordinary times. He is not only his peer to-day, but the fame of the eminent medical men of America will live as long as America shall have a page of history on which to inscribe the names of her illustrious sons.

I must not omit, before concluding, to notice in a cursory way one of the purest and most elevated of rewards which our profession yields. I refer to the pleasure and elevation of character derived from the study of the science. Addison somewhere remarks that "the finest works of invention and imagination are of very little weight when put in the balance with what refines and exalts the rational mind."

There is no portion of the whole Republic of Letters or Science, the study or cultivation of which is better calculated to accomplish this end, than those branches which medical men are led directly or collaterally to engage in. Medicine is itself indeed made up of an association of sciences, each possessing its own intrinsic and peculiar interest and beauty. This pleasure derives dignity from the fact that it is Nature's work, which is at all times the subject of study. What, to take but a simple example, can be more beautiful than the study of the form and proportions and structure of Nature's highest work—Man. The pleasure derived from this study is of the purest and most exalted character; the tendency is to elevate the mind to some conception of the great Architect; and in truth, nothing to my mind so plainly discloses the existence of a Divine Creator.

Medical men are led by a most easy and natural transition to the study of certain collateral sciences. That they possess great interest I need hardly affirm. That a high intellectual pleasure is to be derived from an appreciation of their beauty is equally true. What could be more beautiful than the analogy of the structure and functions of plants to those of animals? What can be more beautiful than their structure itself. You will see the gnarled oaks standing in some of our parks, their branches spread in defiance to the storm, and their trunks to the pathway of the thunderbolt. It has nothing to the ordinary observer of what we call beauty; but it is chosen by writers and speakers as a type of strength and endurance. But let the vegetable physiologist unravel its intricate structure and display it to sight. Then see the myriads upon

myriads of spongiolate rootlets absorbing for the giant, nourishment from the ground, yet so small, as to require the microscope to bring them within the range of vision; and see the vessels for carrying the crude sap up to the leaves to be modified by the action of the air and light, and then carried back again and deposited as new growth between the bark and stem, adding in the year another ring to tell the age of the centenarian; and see on the under surface of the leaves, sheltered from the too-strong rays of the sun, the breathing pores for the admission and escape of air—constituting a breathing apparatus like the lungs of animals,—and see the exquisite hygrometric construction of those pores for regulating the quantity of air in the varying states of the atmosphere; and finally, see the perfect arrangement of organs inclosed within the flower for the reproduction of the species. Many more hidden beauties may be disclosed by the study of vegetable physiology. This and all the collateral sciences are studies like this, open up a new world, and will give you in your weary rides on your daily rounds a companionship which will lighten your toils and will shorten your road, and it will smoothe your path. A companionship better than that of many men, for it is the companionship of Nature.

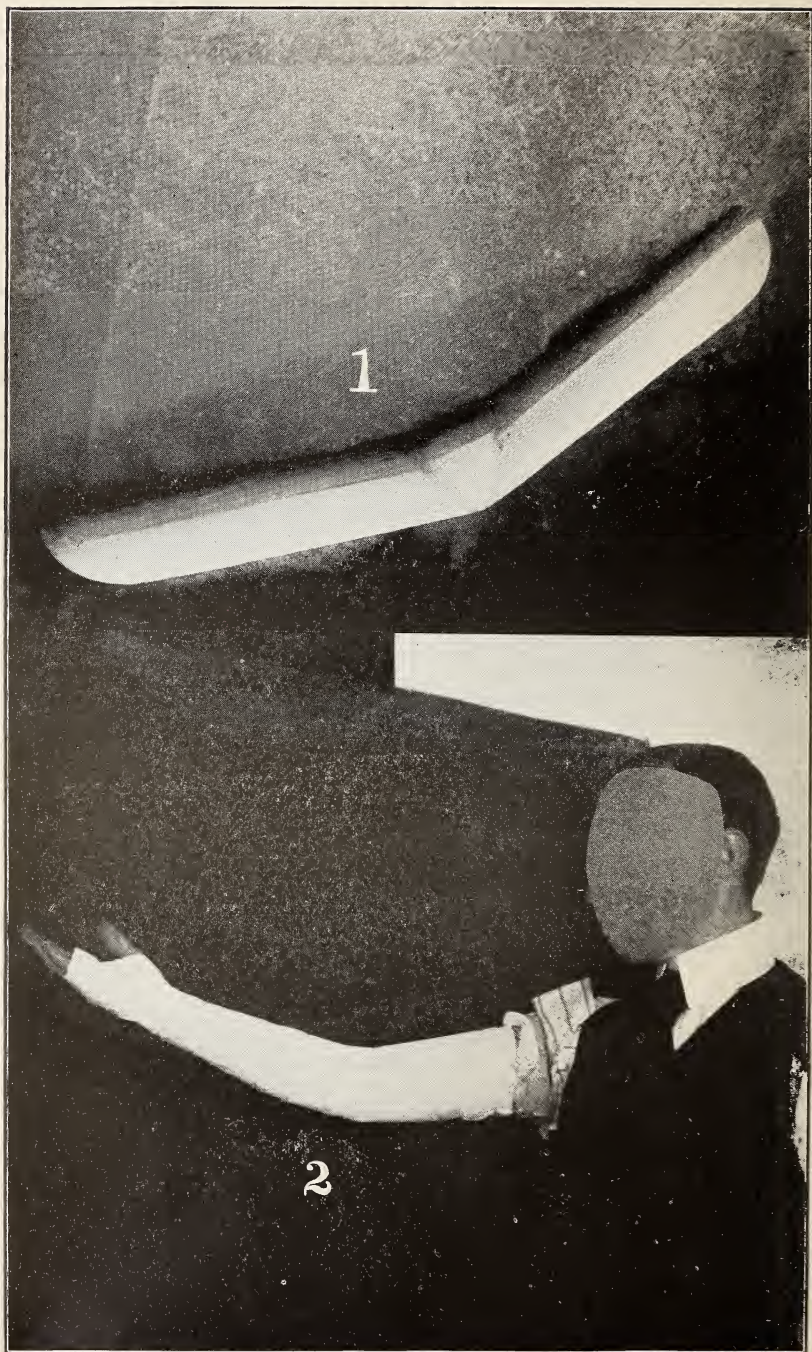
Among those rewards to which I shall call your attention, I come to name the last, as the crowning sheaf of the glory of the rewards of medicine, its mission of mercy.

There is no sphere in life, except it be that of the ministry, which affords so wide a range for doing good as that of the practice of medicine; and there is no higher earthly reward than not only the consciousness of duty well performed, but that also of alleviating suffering, or of rescuing from the grave a valuable life. Nor is the pleasure less when the work is among the sick poor. Indeed, to a generous mind it is infinitely heightened. For what picture is so calculated to arouse the warmest sympathies of our nature as a contemplation of suffering, virtuous poverty. The heart of that physician who does not taste the purest pleasure from a knowledge of having performed some such service as that for example, of removing the scales from the eyes of the blind, and translating them from darkness to light, and throwing open to them once more this beautiful world; or that of lifting a poor father from the bed of suffering and danger, and restoring him to the guardianship and

protection of his helpless family, is indeed poor in those finer feelings of our nature, which constitute the richest treasures that we are heir to.

Not long ago in this amphitheater of our own Charity Hospital, a big, broad shouldered and brawny armed man was brought. His hands were severely lacerated by machinery in which he was working. The injury was such that it was necessary to cut away a part of the hand. He looked at the surgeon's knife and said, "I care not for the pain; it is not that, if you can only leave my hand so that it will be of some use to me. It is my little children, the thought of their asking me for bread when I have none to give them; that is the only real pain that I suffer." Cold indeed must be the heart that would not experience a thrill of pleasure at assisting such manliness.

But strange as it may appear, physicians do sometimes misconceive their true relations in such cases. Sometimes in private practice among the poor, and often in the public hospitals where a little authority is possessed, medical men speak roughly to patients. Do not, I beg you, allow yourselves to commit this error. Rob not a noble act of all its merit. Guard yourselves well against doing so great an injustice to your own character, and so great an outrage upon the sensibilities of one, who, in his present affliction and in his condition of life, has enough to bear without you adding to the burden. Habituate yourselves to treating considerately the feelings of the dependent sick, and speaking to them, not in tones of sickly, hypocritical whining, but with straight-forward, open-hearted kindness. Remember that it is the child of misfortune, that it is your own brother, who appeals to your sympathies; and that but one revolution of the wheel of fortune may place you where you find him.



DR. BLOOM'S PAPER.

The Obtuse Angle in Elbow and Elbow-Joint Fractures.

By JEFFERSON D. BLOOM, M. D., New Orleans.

I mention in the caption to this, "Elbow and Elbow-Joint Fractures," for an experience of many years influences the fixed belief that I have of the efficiency of this angle splint toward a perfect, or nearly perfect, result as its use has obtained. The surgical divisions of injuries about the elbow, with severance of continuity, are recounted in surgical works as supra-trochlear, condyloid, or fracture of the lower third on the humeral side; and olecranon, ulnar, or head of radius on forearm or distal side. Extension and a modulated manipulation with fixation, for the anticipated muscular tetany that results from a trauma sufficient to produce a severance of bone in continuity or lateral effect, is efficient in aiding a physiological repair that an equalized muscular tetany must produce. In a location so active and varied in its importance in normal function, certainly this must be looked upon as a thing most desirable.

Many years of clinical experience influences a thought favorable to the wisdom of such moulding and restraining effect that this angle produces, and which is both anatomical and physiological.

The deforming and functionless results that have been the result of the older methods of right angle treatment of these injuries, the ankylosis that was the condition not only looked forward to, but hoped for, to-day represents a careless and unintelligent application of principle that should not obtain in the application of methods that have experience and thought to justify them.

This method of procedure in injuries as mentioned is equally pertinent to compound as simple fractures, in both after ten days to two weeks of rest and immobility, to the same angle of the limb, a Stromeyer Screw splint is substituted to favor functional movement, to dispel, through capillarity, the exuded material and insure a perfect result to the fracture and the functional membrane that lines the joint.

It is needless to say that in compound injuries the usual aseptic or preparatory antiseptic detail should be given full attention and every requisite to producing a sweet wound should be scrupulously given attention.

Hospital experience has taught me to feel sanguine of the inherent good in this method of procedure and impels me through its

simplicity and ease of application, in addition the excellent results that have been obtained, to make known these forceful facts for the further trial of the method by my professional brothers, whose busy life and activity deprive them of the observation secured by surgical supervision over a city's poor.

Fracture of the Humerus by Muscular Action; Report of a Case.

By DR. E. M. WILLIAMS, Patterson, La.

Muscular violence plays a greater part in fractures of the humerus than in any other long bone in the body; and the humerus stands as practically the sole representative of this accident when a fracturing force of torsion alone is considered. Withal, however, incidents of this kind are of great rarity, considering on the one hand that fractures of the humerus due to all causes constitute 10.16 per cent of all fractures (D. L. Eisendrath, *Keen's Surgery*, vol. 2, p. 75); whereas, on the other, but eighty cases of fractures of the humerus due to muscular violence had been reported in the literature up to February, 1906 (A. P. G. Ashhurst, *University of Penna. Med. Bul.*, Feb., 1906.)

Therefore, the following case is reported; it being considered, too, as of more than exceptional interest, a second fracture occurring after firm union had taken place at the site of the first accident:

F. E., aged 25, of good musculature and previously without illness or injury of any kind bearing upon the condition under consideration, came to the office June 2, 1907. He stated that while in the act of throwing a ball (in a game of base ball) he suddenly heard a sharp "crack," simultaneously with which his right arm fell to his side, useless.

Examination disclosed a spiral fracture of the humerus, at the middle of the shaft of the bone. Deformity was characteristic. There were slight disturbances of sensation in the region supplied by the musculo-spiral nerve, which disappeared within a short time. Reduction was easily made without the use of an anesthetic, and the reposition maintained with an internal right-angular splint and

a shoulder cap. This was removed and replaced at short intervals, massage being given every second day after the third week, and at the expiration of six weeks from the date of the accident, the splint was removed permanently. At this time patient was able to use the limb very well. Union was firm and in seemingly perfect position (no X-ray examination could be made, but to all appearances the alignment was perfect.) A seventh week of more or less rest to the part was insisted upon, after which he returned to his work of book-keeping.

On August 2, while playing with his sister, he threw out his arm in an effort to slap her, and the fracture repeated itself at the junction of the middle and lower thirds of the shaft, and seemingly transverse. The same treatment was instituted as before, and the patient discharged in six weeks, with good union, in perfect position, and with good functional results.

As has been said above, this case seems to be of more than usual interest through the occurrence of a second fracture caused by identically the same muscular action responsible for the first accident. To repeat again, when first discharged the union was perfectly sound and the arm in good position; as shown by my own examination, and that of my colleague, Dr. W. D. Roussel, and as further proven by the fact that he went about his work, lifting heavy books, etc., for a week before his second misfortune occurred. The line of fracture in the second instance was transverse and at a lower level than in the first. I therefore consider the condition as one of two separate and distinct injuries, the second not dependent upon the first.

A point of interest not mentioned above was that the thrown ball reached its intended destination, thus indicating the physiological time at which the fracture took place.

In the matter of treatment, the splint used was the one devised by Dr. J. D. Bloom, of New Orleans, to the thorough efficacy of which I was a frequent witness while serving as Interne in the Charity Hospital in that city, in which institution Dr. Bloom was then house surgeon. It had often occurred to me since that a method so simple, and, withal, so efficient, deserved preservation to the profession, and at the time that this case occurred I promised myself the task of describing his method. In this, however, Dr.

Bloom has forestalled me (*N. O. MED. & SURG. J'NL*, Sept., '07), fortunately; since his description, as the originator, is necessarily clearer and more intelligible than any other might have been.

Louisiana State Medical Society Proceedings.

(EDITED BY PUBLICATION COMMITTEE).

P. L. Thibaut, M. D., Chairman.

What Surgery Should the Country Doctor do and what can he Afford to Neglect?

By DR. E. D. NEWELL, St. Joseph, La.

In selecting this subject for my address before the section on surgery I was actuated by a desire to help other country doctors overcome some of the most difficult, amazing and trying problems that I have had to deal with, and to learn from others, who are doing surgical practice in the country, the work that they are doing in the same field. Those who have never attempted to do real surgical work outside of the well-equipped hospitals and sanitariums, with their abundance of assistants and surgical dressings and unlimited supply of instruments, can have no idea of the perplexing ordeal that confronts the country surgeon, who has to operate without an operating room, without assistants, or very poor ones, without adequate surgical dressings and with a very small selection of instruments.

When the young doctor graduates and leaves college to begin practice in the country he is almost overwhelmed by the difficulties that confront him when he first begins to do surgical work.

All of his teachings have been in an atmosphere of ideal conditions for the best surgical work. Every operation that he has witnessed he has seen a trained assistant devote his entire time to giving the anesthetic, a room full of the best assistants and nurses at the operator's elbow, and all the most approved appliances for obtaining an aseptic field. When he refers to his textbook for guidance in an operation to be performed, he sees again the formidable array of

instruments and general paraphernalia that the authors indicate, even for some of the minor operations. However formidable may be the difficulties, if he is earnest in his desire to do good work it can be done. The wizards of the Northwest, in that little country town of Rochester, should fire with pride and enthusiasm every country doctor, and spur him on to the possibilities that are ever open with golden success to individuality and to indefatigable work.

To do surgery at all in the country with any measure of success and pleasure in your work I think impossible without some form of an operating room and a room or rooms adjoining, both of which are near your office.

I hope I may be pardoned for describing the simple arrangement of rooms that I have used for five years with a great deal of pleasure and comfort, and with some degree of success and of inestimable convenience to patients. We have three rooms on the second floor of a small brick building; the rooms are large, well ventilated and plenty of light; the rooms all open into each other and are connected on the side by a gallery. The front room we use for office, reception and general business room, the second is the consultation and operating room, and the third is for the beds. We have water throughout the building, which is supplied by an elevated iron tank at the back of the building. We have acetylene gas in the building, which furnishes a beautiful light for operating at night, heats water for sterilization and makes an ideal light for a reflector for nose and throat work. One colored woman attends to the rooms, assists in preparing patients for the operation, assists during the operation, nurses them after the operation and prepares their meals. This simple equipment can be had by every country doctor who cares to do surgical work, and without some such arrangement I do not believe that surgical work in the country is practicable.

Before we had our present arrangement we dreaded the calls for surgical work, as it meant hasty packing of instruments, dressings and appliances, with always the anxiety that the most important instrument would be left behind (which very frequently was the case), preparing an improvised operating table, personal attention to patient, sterilization, teaching green assistants, and, most of all, an unnecessary waste of time and horrible physical discomfort.

Now, in the great majority of all cases of accidental surgery, and

in nearly all of the operations of election, the patients are brought direct to our rooms, as they know that they can be taken care of there, and even when we do make emergency calls we usually apply first aid dressings and bring them to our rooms for subsequent operation, under more favorable conditions.

Good work is not necessarily an accompaniment of marble floors, countless trays of instruments and hordes of assistants. We have seen the wonderful Mayos operate in their simple little rooms, with a trained nurse as the "anesthetist" and a sister of charity as chief assistant. Still more were we impressed when we saw Joseph Price, of Philadelphia, operating in Philadelphia, do the most difficult surgical work, using an ash board, supported by wooden horses, for his operating table. All of the accessory tables were of plain wood, and all the instruments and dressings were sterilized in an Arnold Sterilizer.

Dr. Price operates in this way at his clinic to teach the country doctors how easy it is to operate and to operate successfully with the simplest paraphernalia within the reach of all.

All of the minor surgical work, whether in the domain of the general surgeon, the obstetrician, gynecologist or the specialist, should be done by the country doctor. If he cultivates the habit of doing this work it will be of immeasurable value to the patients and give him much pleasure and more cash. But it is impossible to cultivate this habit in the too often seen, single-room doctor's office, with its dirty floors, dirty shelves filled with dirty bottles and dirty instruments and dusty, fly-specked dressings stored away in musty, dirty drawers.

It is really the minor operations, neatly, carefully and patiently done, and without pain, that spread your reputation and endear you to the hearts of your patients.

A chaneroid under the prepuce, complicated with phimosis, if treated by injections with iodoform in suspension—and this is the way the most approved teachers treated it a few years ago—would take some time to be healed and cause the patient many hours and days of suffering and inconvenience; circumcise your patient under local anesthesia and you have a lasting friend. There are many such similar operations which, if you are not prepared, will be avoided for the easier prescription.

Nor should we indefinitely treat locally by applications, an endometritis or cervicitis feeling that we had done all that our surgical surroundings justified, when a curettage and a trochelorrhaphy would probably cure our patient promptly.

I remember vividly a case of tuberculosis of the testicle that had been treated locally by another doctor for nearly a year, the patient consulted us, but we refused to treat him unless we were allowed to castrate, he was horrified at first, but finally consented and was discharged cured in 10 days.

Any country doctor who has ever performed a paracentesis for acute otitis media, operated for protruding, painful hemorrhoids, lanced a tonsillar or peri-tonsillar abscess, or operated for suppurating prostate gland, removed a foreign body deeply imbedded in the cornea, or drained a pelvic abscess and seen the agonized patient suddenly beaming with smiling gratitude will never allow adverse surroundings or difficulties to ease his conscience by time killing palliatives and excuses. I believe that all such operations and analogous ones, every country doctor should do with ease and facility.

In obstetrical work the country doctor should be as well prepared as the city practitioner; removing an adherent placenta, performing a podalic-version, delivering head engaged at the brim, delivering an unrotated occipito-posterior presentation, there is positively no excuse for not doing alone under any and all circumstances, when necessity demands it. I have done them all and without an assistant, and under the worst conditions of ignorance and unsanitary surroundings.

And there is another class of operations that it is the imperative duty of every country doctor to be prepared to perform—the accident and emergency cases and the operations of necessity. The accident and emergency cases include any operation that may be necessary to be performed at once, to save the life of the patient or any important portion of the body. In the operations of necessity I would include such operations as trephining the skull for fracture, ligating the middle meningeal artery for hemorrhage, operating for mastoiditis, performing tracheotomy, operating for abscess of the liver, etc.

In the great majority of all injury and emergency cases time is

valuable and the poor suffering patient must be given immediate relief. Asepsis is valuable, and so is a well ordered operating room, but we must not sacrifice life to asepsis and to details. Recently a railroad hand was brought to our office who had been run over by a car, and his foot, leg and the lower third of thigh had been crushed and mangled, the loss of blood was fearful as the injury occurred several hours before we saw him. As there was constant oozing from a large surface we amputated promptly at middle third of thigh and with but scant preparation. He made a quick recovery, and without infection. I cannot better express our views on the importance of the doctor's duty in such emergency cases than to quote from a lecture we heard the brilliant and resourceful Dawborn, of New York, give to his post-graduate class in operative surgery. Dawborn says that if he was in the country and without instruments or surgical dressings, and was called in suddenly to treat a patient with gun-shot wound, of the abdomen, that he would operate and operate at once. Whisky and morphin would be his anesthetic, his pocket knife his scalpel, the house-wife would furnish needle and thread, and his shirt tail, if necessary, would be sterilized for mops and dressings.

Maurice Richardson, of Boston, in his address before the A. M. A. at Portland, beautifully illustrates the same idea: He says: When a patient has acute appendicitis with general peritonitis, the responsibility in operating is slight; the operation must be performed. There is no greater responsibility in this decision than there is in the decision of going to rescue a drowning child.

We country doctors are too easily awed, oppressed and embarrassed by the glibness with which even the callow youths of the city profession flirt with hysterectomies, oophorectomies and laparotomies. We are too prone to forget that mechanical skill alone is of little value in the equipment of the surgeon, that the real surgeon must be a well rounded man, with a practical knowledge of all diseases that he may make intelligent observations, accurate deductions, and be able to give that most difficult of all advice—when to operate, and whether to operate. The environments of the country doctor and the very broadness of his practice well equip him, if he is an intelligent and industrious observer, for the most difficult part of the education of a well-rounded surgeon. History

does not teach us that the demonstrator of anatomy and the professor of operative surgery have made our most brilliant surgeons.

Sir Frederick Treves says: "The actual manipulative part of surgery requires no very great skill, and many an artisan shows infinitely more adeptness in his daily work. A wood engraver would probably soon find as little difficulty in baring the carotid artery as a stone carver would find in performing osteotomy."

It requires less knowledge to suspend a uterus, remove tubes and ovaries or to remove an appendix than to differentiate between the intermittent joint effusions and tubercular arthritis.

Considering these points the country surgeon should not feel that he is not doing good surgery because he is so situated that he can not do all the surgical work that is done with such ease and facility in the large towns and cities.

The very isolation of the country doctor makes him self-reliant, independent and not a blind follower of any particular school of operators. It is well to be an iconoclast in surgery; do not adhere blindly to any man's teachings, even if he has been your professor of surgery, but follow all teachings with self-questioning suspicion and incredulity. But a few years ago all surgical wounds were dressed with an antiseptic powder of some kind; now it is rarely ever done; all redressing and suppurating wounds were flooded with antiseptic solutions; it was considered imperative then; now how seldom they are used!

A few years ago one of the instructors at Tulane taught that in all cases of abortion or miscarriage the uterus should be curetted with a sharp curette; he also taught that you should curette the uterus in all cases of puerperal infection. We know now what unnecessary surgical interference this was and the fearful mortality it entailed.

A standard textbook on gynecology, published a few years ago, makes the following statement: "Curettage is positively indicated in every case of acute tubal and peritoneal disease when there is even a suspicion that the infection originated in the endometrium, and the more acute the symptoms the greater the indication for the operation."

It is humiliating to think that intelligent men should have been so cruelly wrong in their teachings and so narrow in their observa-

tions and interpretations. Howard Kelly says on this subject: "Expectancy is necessary in the acute stages of the disease or one of its exacerbations, on account of the increased danger from operation at this period. During the acute stages of the formation of a pelvic abscess the patient must be kept absolutely at rest, the bowels freely open and ice poultices applied to the abdomen."

Wiley of New York says: "A few years ago plates full of normal tubes and ovaries were passed around in the society at every meeting. The excuse for such radical work then was microcystic degeneration of the ovaries."

Kelly says: "The traditions of surgery and its best principles all point toward conservatism as its highest goal. In the same way why should we not believe that many of the operations that are considered imperative by the specialist of today, in a few years be regarded as cruelly unnecessary."

Considering carefully the above facts, the country doctor can easily afford to neglect to perform many of the operations that he sees performed so easily and hastily at the great hospital centers. Of course I do not plead conservatism as the only reason for advising caution in operating for a displaced uterus, removing tubes and ovaries, removing the appendix in the interval, operating for gallstones that are not giving much trouble, operating for ulcer of the stomach, removing a fibroid uterus, and many other such operations that do not demand immediate attention. These cases can all be sent to the great hospitals or sanitariums, to the great benefit of the patients, where the most skilled operators operate under the most favorable conditions, for here we have the skill of daily experience, the best assistants, the best aseptic surgery and the best after-treatment.

We have the desire and craving to do this class of surgery, but there is ever ringing in our conscience another quotation from Maurice Richardson: "When the surgeon takes a patient who is in comparative good health, makes him unconscious, opens his abdomen and removes his appendix, then the feeling of responsibility is to be compared only to that which one would feel if he were to throw a child into the sea and afterward jump overboard to save him."

On the same subject Treves says: "Were the death rate of hys-

terectomy lower by three-fold than it is, it would not sanction the performance of that operation on account of a small fibroid tumor which had ceased to grow, which produced no symptoms, but which the patient, as a whim, was determined to be freed from."

Quoting further from Maurice Richardson, he says: "Many operations like the removal of the vermiform appendix in the period of health, the removal of fibroids which are not seriously offending, the removal of gallstones that are not causing symptoms, are operations of choice rather than of necessity; they are operations which should never be advised unless they are to be performed by men of the greatest skill."

If the great operators feel as they do about such operations, how much more so should the country doctor, who hasn't the skill that daily operations give, who hasn't the trained assistants and trained nurses, and who hasn't the perfect surgical surroundings, tune his conscience to the highest tension before undertaking such operations of choice.

DISCUSSION.

DR. E. D. MARTIN: Gentlemen, after hearing this paper, my only fear is that Dr. Newell will soon be moving to a big town. The paper is full of interest and brings out an important fact. It has been my pleasure to be associated here with a great many country physicians. In all of my lectures emphasis is laid on the simplicity of the operating room and what is required. These questions have almost been answered by the doctor. The idea that we must have a fine and elaborate operating room with tiled floor is a serious mistake. Of course, in large centers, where we are dealing with all kinds of cases, we have to have operating rooms which may be thoroughly sterilized, but you country gentlemen can operate in any cabin with just as good results. You do not have to wash the walls, etc. And then, too, the instruments required are simple. A fish kettle will accomplish as good results as a \$450.00 sterilizing apparatus. It is not the instrument; it is the man.

While a planter I sent for a carpenter to build some cabins. He brought with him a plane, a square, a saw and a hatchet. I asked him where his tools were and he said: "Here they are. Let me tell you, boss, the men that have all the fine tools spend all their

time sharpening them.” That made an impression upon my mind. No one except those having large number of instruments can appreciate the time, patience and care required. Of course, we have to have a great many instruments in the city, but we often see a surgeon undertaking to do an operation with instruments he knows nothing about. He buys a new instrument he has never seen before and goes into the hospital to do an operation. He would do better to use the plane, the saw and hatchet. We ought to be prepared to do emergency work. With the requirements of our colleges, the post-graduate schools, and everything at our command, we certainly ought to go out prepared for emergencies. I mean ruptured appendices, strangulated hernia, etc., cases where it is imperative that something be done in order that the life of the patient be saved. In these cases, even though you fail in your undertaking, you at least will know that you have done something to preserve a life. If we learn nothing else from this paper we learn this, that we can perform emergency operations with anything at our command.

DR. BARRIER: This paper having been written by a country doctor and for the benefit of the country doctor—and, I must add, had I not known he was a country doctor, I would have thought it was written by a city doctor—I do not rise to offer any criticism of his paper. I could not. But I wish to say this, suppose every country doctor, having heard this paper, aroused with an enthusiasm to become a surgeon, goes home Friday morning and makes arrangements with a contractor to put him up a brick building with three rooms, and gives the instrument maker an order to equip it as Dr. Newell advises, and says to himself, “I will be a surgeon?” Mr. President and gentlemen, were this carried out by every country doctor in the State of Louisiana, I tell you I believe the people of the State of Louisiana would rise up in arms. Now, Mr. President, I am a country doctor, and while I am not as big a fool as some country doctors are, there are some that have more sense than I have. I am not a surgeon and never could hope to be one, and if you were to give me the paraphernalia that Dr. Newell describes I could not be one, nor can every doctor become a surgeon with all his efforts. We have heard much uttered in the spirit of altruism about relieving poor, suffering humanity, but I say that poor, suffering humanity would have a poor show were every country doctor

to become a surgeon. Now, I say to the country doctor, if you feel like you have a talent for surgery, and you have the means to equip yourself for it, go and do so, but if you haven't the talent, for God's sake, abstain. I do say this to the country doctor: When you are called into a case, an emergency, and that is the only chance, roll up your sleeves, buckle on your armor and do the best you can. If you fail, you have the consciousness of having done the best you could, but I say, if you take chances on your patient to do these operations, when there is some one close at hand who is qualified, who is competent, who is equipped to do this work, if you then undertake this work, I say you are a criminal.

DR. ABSHIRE: I am a country doctor, living in the open country, not even in a little town, my closest colleague being six miles away. My invariable rule is this, in all emergency cases I do the best I can. All cases that can be treated conservatively or sent away are sent to a well-equipped hospital. I have invariably followed this rule since I entered the practice. I have performed some surgical operations myself of the greatest magnitude, even opening the abdomen in emergencies, but have lost more than I have saved, unfortunately, I think Dr. Newell is too good to be a country doctor. He had better remove to New Orleans, where I can send my cases on to him,

The Differential Diagnosis of the So-Called Chronic Rheumatisms.

EDWARD S. HATCH, M. D.

I shall not try this morning to offer you anything new in the differential diagnosis of the chronic rheumatisms, but rather to bring before you in as clear a way as I can, some of the things which I have observed in common with the other men throughout the country who are giving their attention to this class of work.

I think you will all agree that the subject under discussion appeals to the man in general practice as well as to the orthopedic specialist, and also that the various types which I shall show by photographs and radiographs to-day are often called rheumatic and chronic rheumatism, and diagnosed as such.

I shall not take up here a discussion of the treatment of these

various conditions, except to say that the treatment of the different types so far varies as to make their differential diagnosis of the greatest importance.

The various conditions will be taken up under the classification of Dr. Goldthwaite, of Boston, because it seems from my experience that the different cases which we see fall more nearly under one of these classes than under those of any other classification which we have at present.

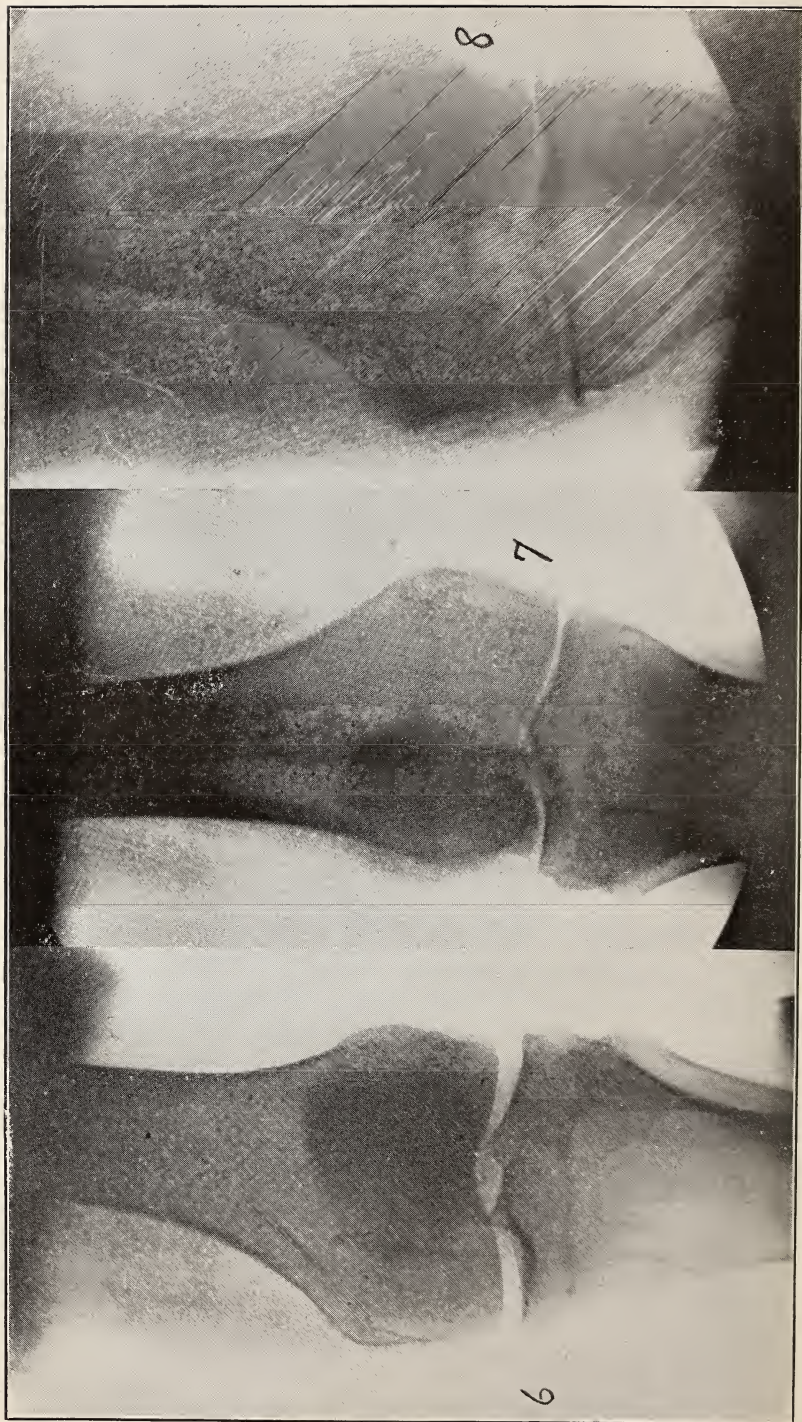
It is fair to say that we sometimes see cases that do not fall under any of these heads and which for want of a better name, we will have to class as chronic rheumatism, I refer to those cases of painful, stiff, and sometimes misshapen joints which follow after attacks of acute or sub-acute rheumatism.

The distortion in these cases does not seem to be due to bony or cartilaginous changes, and it is probable that further investigations will put these cases under the type of "Infectious Arthritis."

The classification embraces five types, and is as follows: (1) Chronic villus arthritis; (2), atrophic arthritis; (3), hypertrophic arthritis; (4), infectious arthritis; and (5), chronic gout.

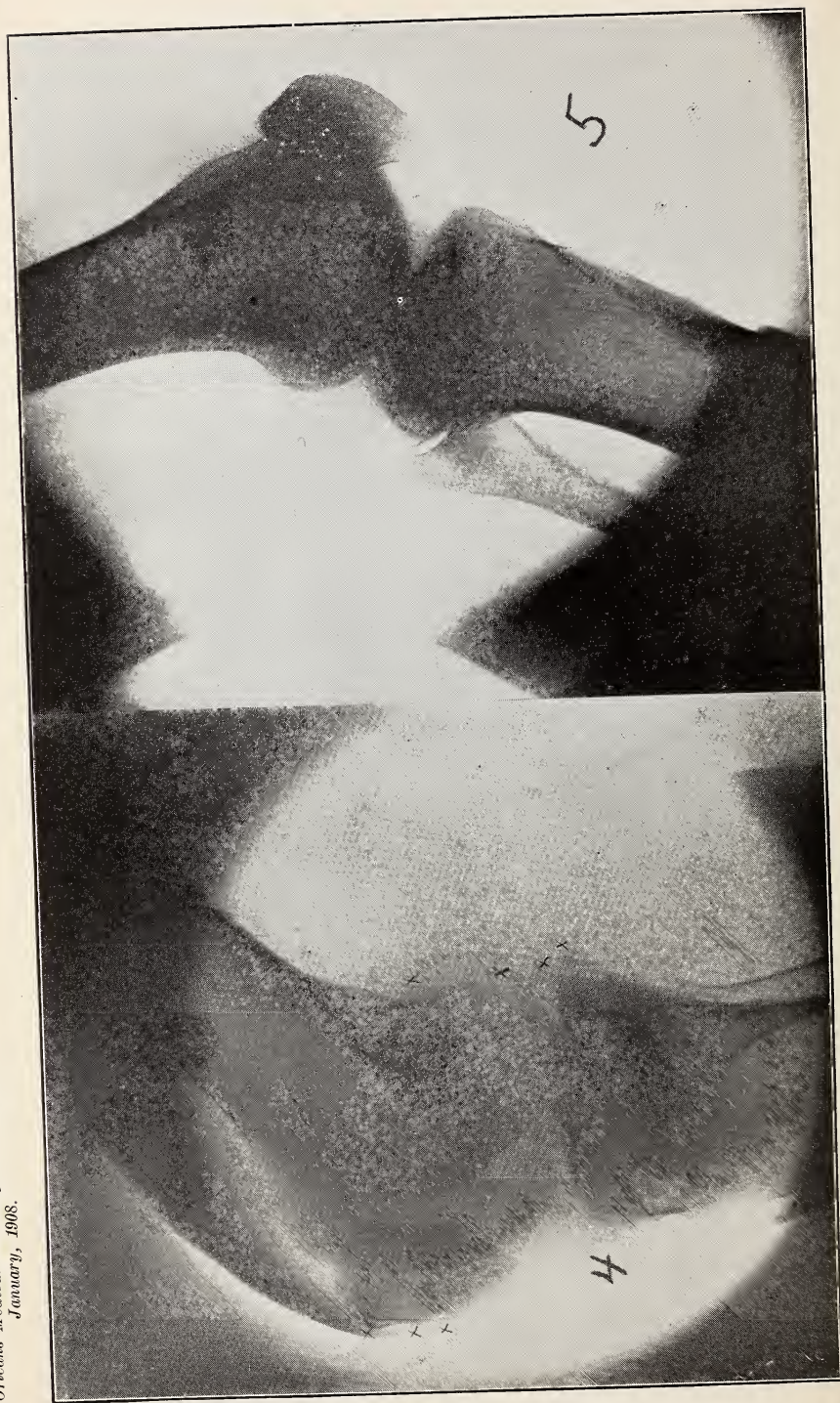
The first type, chronic villus arthritis, is not a general disease, nor is it progressive. This condition is brought about, for instance, in the knee, where it is very common, sometimes by external injury, or by continuous internal trauma, such as faulty position of the feet in walking, walking with the knees flexed, or in some occupation in which the knees are constantly being flexed and extended. In consequence of this the membrane of the joint becomes stretched and congested, a little later this membrane becomes folded on itself, and sometimes there are fringes formed which hang down into the joint, and as the joint is moved these become pinched, and in consequence of this more swollen, and still later due to an insufficient blood supply these fringes undergo a fatty degeneration and we get the lipoma arborescens.

These patients usually give a history extending over several weeks or months of a painful and somewhat swollen joint, that is worse with exercise and that quiets down with rest. On examination the joint is found to be larger than normal, with some tenderness, and crepitation on motion, the hypertrophied villi can be felt on either side of the patella in the knee, and if they are very large



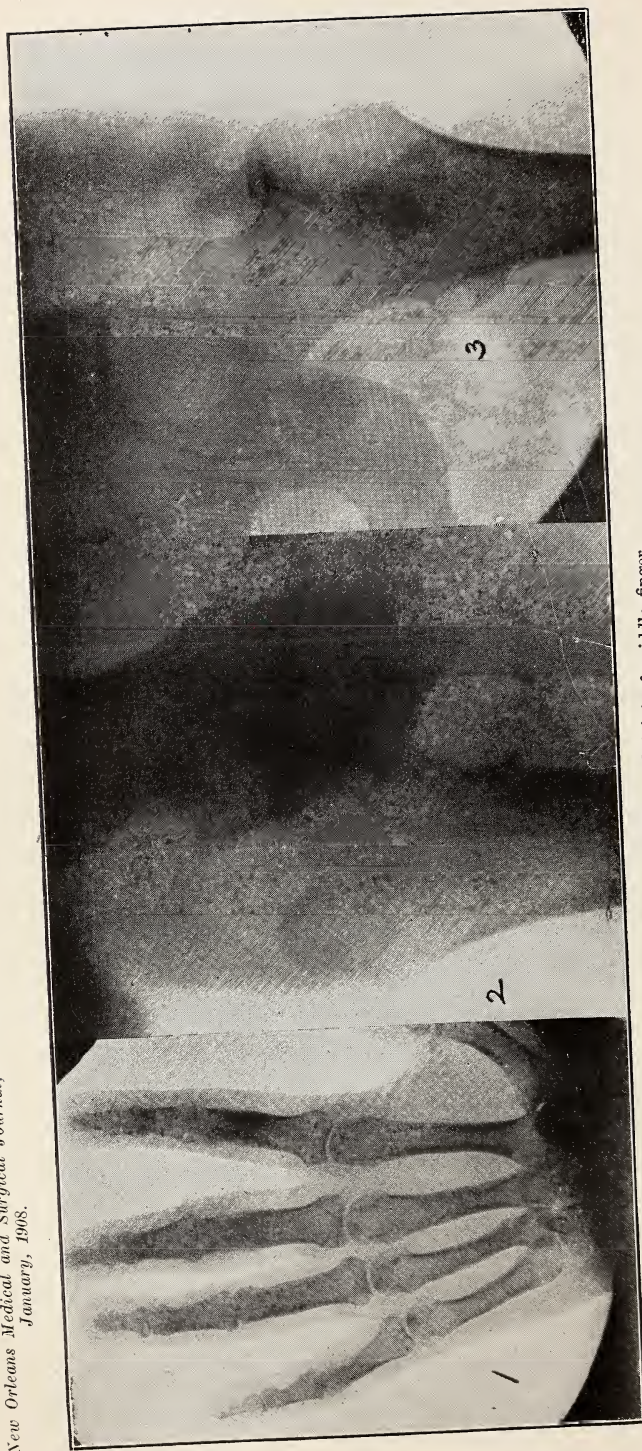
6. Normal knee joint.
7. Atrophic arthritis of knee joint.
8. Combined atrophic and hypertrophic arthritis of knee joint.

DR. HATCH'S PAPER.



4. Hypertrophic arthritis of knee joint (lateral view).
5. Lateral view of normal knee joint.

DR. HATCHES PAPER.



1. Atrophic arthritis of interphalangeal joint of middle finger.
2. Hypertrophic arthritis of left hip joint. Note saucer-like overgrowth of bone.
3. Normal hip joint.

DR. HATCH'S PAPER.

the normal fossa on either side of the patella may be obliterated. If the lipomata are present they can be distinctly palpated. The second type, atrophic arthritis, is, according to Dr. Goldthwaite, "a progressive disease, resulting in marked distortion and great crippling, with the pathology one of atrophy, in which the joint membrane, the cartilage and the bone show the change." There is nothing known definitely about the etiology, but it seems to be due possibly either to an acute auto-intoxication due to defective assimilation, or of neural origin. Sometimes, in taking the history of a case, we can get as exciting causes some of the following: worry, grief, overwork, mental shock, or poor and insufficient food, young women are the most common sufferers of the atrophic type. In the early stages the joints affected have a spindle-shaped swelling which is caused by an increase in the synovial fluid, and the overlying skin is white and moist from perspiration.

This type very commonly starts in the hands and wrists, and is sometimes limited to the fingers of one or both hands, the second interphalangeal joints are usually involved first, in contradistinction from the first plalangeal joint, which are often the seat of the hypertrophic type. Later, other and larger joints become involved. At this stage the atrophy of the cartilages can be seen from the radiograph. As the disease progresses, for example, in the finger, there is often found flexion, contraction and deviation towards the inner side. The joints go on to ankylosis slowly, and the disease may progress steadily or may remain in a few joints for some time and then later become more general. I have seen one case with all the joints in the body, including the jaws, affected, and this is the class of cases which we see in our poor houses which are so crippled that they cannot care for themselves.

The third type, hypertrophic arthritis, is, as the name implies, a true overgrowth of cartilage and bone.

The cause of this type is unknown, but it is more common in men than in women, and in late middle life. Exposure to damp and cold and traumatism seem to be exciting causes. The process consists in a thickening of the edges of the articular cartilages, these form ridges or small prominences and then become ossified and mechanically interfere with motion. The ridges of bone can be distinctly felt in well marked cases. This is the type that causes the so-called

Heberden's nodes, and as can be seen by some of the pictures that are passing around, the new bone formation can be very beautifully traced in the radiograph. The joints usually affected are the terminal finger joints, the knees, hips, spine, and shoulders. The hypertrophic spine is very commonly found, and the process usually takes place more on one side of the vertebrae than on the other, this gives a stiff spine without kyphosis, which shows well when the patient tries to bend laterally, this one-sided affair also accounts for the fact that the patients nearly always say that the pain is only in one leg. These pains are due to nerve root pressure caused by the new bony outgrowth, and will account for many of the cases of so-called sciatica. This type is often called osteo-arthritis, and is sometimes confined to one joint and is not generally progressive, and is not nearly so crippling as the atrophic type.

The fourth type, infectious arthritis, is more common than the others, and is due to the presence in the joint of whatever infectious organism is causing the trouble, or to the toxins produced by the infection which is situated in some other region of the body. This is the type of arthritis in children which is called Still's disease. The onset is generally sudden, and two or more joints become affected at the same time, it usually does not progress to other joints, but this is occasionally the case. The symptoms are those of infection elsewhere in the body, namely, high temperature and pulse, with enlarged glands, and spleen, and a leucocytosis. We often see cases in which we cannot trace the infection, probably because the causative trouble was very slight and all out of proportion to the joint condition.

As an example of this I might briefly relate the following case: The patient, E. H., suffered from a very mild attack of intestinal la grippe, this lasted four days with slight fever, diarrhea, and malaise.

Several days later, in the evening, patient turned his right ankle in walking; this caused no pain at the time, but the following morning it was somewhat swollen and painful; this grew steadily worse, so that by the following morning he was unable to bear any weight on the foot; at that time the foot was very much swollen, and tender to the slightest pressure, and the patient had a slight increase in temperature and pulse, and a leucocytosis. A few days later the left wrist became swollen, painful, and stiff, and still later the right

elbow and right wrist. The condition in the wrists promptly subsided, but the stiffness and pain in the ankle and elbow persisted for some weeks, but under the usual treatment for these cases, all the joints eventually cleared up and are now perfectly normal.

It seems reasonable to suppose that cases like the above are due to the toxins getting into the various joints from a focus elsewhere in the body, and the inflammation is a periarticular one.

In this type of case the X-ray is negative, as there are no bony or cartilaginous changes. The swelling is due to a moderate effusion into the joint; this swelling may subside in a few days, and possibly reappear again in the same joint, or it may persist and ankylosis result. The ankylosis, in these cases, is due to the adhesions formed in the joint by the inflammation.

The fifth type, chronic gout, is a very rare type of disease, compared with the others; the etiology is unknown.

The condition is one in which deposits of urate of soda are found in the soft parts about the joint, and is often seen in the first phalanges as in the hypertrophic form, but the nodes are soft and can be moved about under the finger, thereby differing markedly from the hypertrophic form. The deposits later break down and discharge urate of soda, and the bone about the site of these deposits may become absorbed.

In doubtful cases, the X-ray will at once clear up the diagnosis.

It is only fair to say in closing that in some cases we will find two of the classes combined in the same case, as one of the radiographs now passing around will show, namely, in this case the atrophic and hypertrophic types.

Therefore, some of the observers to-day are inclined to call all of these arthritis deformans.

We surely have still much to learn in the differentiation of these very interesting diseases, but I think that the classification of Dr. Goldthwaite, as outlined here, is by far the best working one that we have at present, and I am sure that nearly all cases can be quite promptly classified under one of the above heads.

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DISCUSSION.

DR. MCILHENNY. There is one condition I wish to speak of that did not come in his classification. This is a condition caused by trauma, which is not the typical villus arthritis, but resembles the lipoma arborescens of Konig, and the lipoma solitarium of Volkmann. In a case we had, we found on making an incision that it was due to a hypertrophied piece of fat. It was simply hypertrophy of the sub-patellar fat. When the patient walked, especially when going up stairs, considerable pain was experienced. On section the mass was found to be very rich in blood vessels, and of a yellowish brown color. The history begins, say about three weeks after the injury, when the patient notices a slight pain radiating from the tibial head upwards and inwards; it increases with time in severity, but cases that are put to bed for a day or two are relieved for a time. When the patient walks, this tumor mass hanging down gets pinched and causes pain. This is decidedly a traumatic condition. Hobbs invariably operates, and in about ten days the patient begins to walk around. I have seen quite a number of these cases and believe if more attention were paid to this condition it would be more frequently recognized and more patients would be relieved.

DR. OECHSNER. It is very unfortunate that we could not have embraced in this paper the treatment. It strikes me that the differential diagnosis is extremely important. There will be some difficulty if we try to work out the new classification so as to fit the old. The hypertrophic arthritides are usually those which we find in old people; these old people who come to the physician and say, "Doctor, I have another attack of rheumatism." An examination with the X-ray will often show the characteristic condition of the joint. Formerly the patient was dismissed with some sedative, and no attention was paid to the joints. Most cases of so-called acute articular rheumatism are probably cases of infectious arthritis. These concern the general practitioner in an important way. We know that the foci of infection are many. The vessels afford a very important route from which infection is disseminated into the joints. You have all seen cases of acute poly-arthritis, which have frequently been called acute articular rheumatism, associated with pneumonia, tonsilitis and other infectious diseases. It has not

been settled whether there is such a thing as acute articular rheumatism or not. If not out of order, a word about the treatment. This is the point where the osteopath gets in his work; massage, hot air, bath, rest; less internal medication. And of these, properly regulated, rest is probably the chief factor in successful treatment.

Arterial Varix of the Femoral Vessels Operated on by the Matas-Bickham Method.

By HERMANN B. GESSNER, M. D.

1. HISTORICAL NOTE: In the Feb., 1903, *Annals of Surgery*, appeared Dr. Rudolph Matas' introductory article, "An Operation for the Radical Cure of Aneurism Based Upon Arteriorrhaphy."

Dr. W. S. Bickham, in May, 1904, issue of this publication, suggested the application of the same principle (radical cure of aneurism by incision and by suture of the orifices from within) to the conditions grouped together under the name arterio-venous aneurism.

2. CASE REPORTS. Charlie Watson, colored, laborer, 22 years of age, was admitted to ward of Charity Hospital of New Orleans, on May 27, 1906. His family history was unimportant; personal history negative save for the fact of alcoholic excesses up to a recent period.

The present illness dates back 12 years to the time when he received the contents of a shotgun in his abdomen and right thigh. This injury confined him to bed two months. No ill effects were observed for a period of about 11 years. At the end of this time he noticed a thumping in his right thigh which persisted up to the time of his admission and caused him considerable uneasiness.

Examination showed an abnormal degree of pulsation over the course of the vessels about the middle of the thigh. On palpation a superficial thrill was felt; deeper pressure conveyed the impression of an aneurismal pulsation. The thrill could be felt over the course of the vessels as far up as Poupart's ligament, as far down as the popliteal space. Auscultation revealed a steady buzzing sound over which was superimposed with each ventricular contraction an aneurismal bruit. When the femoral artery was controlled

by central pressure a mass about one inch in diameter was palpable, the size of which could be materially diminished by centrifugal massage. The dorsalis pedis and the posterior tibial artery of the affected side were thought to pulsate with somewhat less force than the arteries of the unaffected (left) side.

The aneurismal pulsation felt on deep pressure, the aneurismal bruit and the persistence of a swelling though small—in spite of central control of the artery and centrifugal massage, influenced the diagnosis of a varicose aneurism, the signs mentioned being thought to indicate the existence of a distinct aneurismal sac between the artery and the vein.

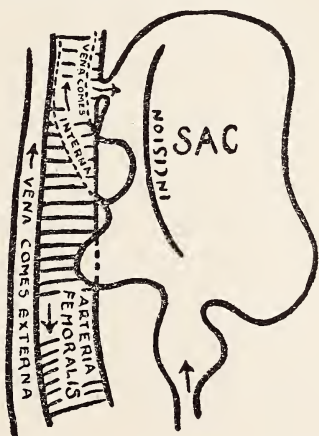
On the strength of this diagnosis it was thought best to operate and relieve the patient of danger of rupture of his supposed aneurismal sac. On May 30 the operation was undertaken, under ether, preceded by $\frac{1}{4}$ gr. morphin sulph., hypodermatically. An incision was made in the line of the vessels: the Sartorius muscle was identified and retracted inward. The vessels were exposed, showing a strongly pulsating tumor in Hunter's canal, a little below the middle. This tumor was about 2 inches long by $1\frac{1}{2}$ inches in transverse measurement, and when freed from its surroundings and supporting tissues seemed in danger of rupture, its coats being quite thin. It was connected with the internal vena comes,* the external being intact. It was in fact the vena comes interna abnormally distended at this level by the inflow of blood from the femoral artery.

A rubber constrictor was applied below Poupart's ligament. The sac was incised longitudinally. Free venous bleeding followed, coming into the incised sac through an opening on its outer side, the medium of communication between it and the vena comes interna, the upper end of which appeared to lie behind the artery. While the hemorrhage from this source was controlled by digital pressure above and below, this opening was sutured—from within the sac—with a double row of fine silk Lembert stitches. The opening from the artery was now found, above the opening just closed, and about 1-14 inch in diameter. This was closed with a double row of fine silk Lembert stitches. Lastly a third opening, leading into the distal portion of the vena comes interna was sutured, this, with a sin-

*While the occurrence of venae comites to the superficial femoral is noted by Morris in his text book on anatomy, Dr. Henry Bayon, Demonstrator of Anatomy in the Tulane University of La., informs me that this is very rare according to his observations.

gle layer of sutures. The sac was allowed to fall over the closed openings, being sutured to the vastus internus externally. No bleeding followed the removal of the constrictor. Deep Kumol cat-gut sutures were introduced and the skin sutured with silk-worm gut. At the end of the operation the vessels of the foot could be felt pulsating as before.

Subcutaneous infection of a mild but persistent character developed: this was treated with drainage, irrigation, curetting. The patient was finally discharged on Aug. 5th.



3. COMMENT. The direction taken by the vein wall (see figure) when ballooned out by the arterial stream poured in from its outer side seems curious. No doubt the existing outline is accounted for by the varying resistance at different portions of the vein's circumference. At any rate the drawing was made shortly after the operation and appeared correct to those present at the time to whom it was presented for criticism.

The diagnosis of varicose aneurism was disproved by the operation, as no aneurismal sac was found between the artery and vein, yet the condition found certainly differed from that characteristic of aneurismal varix, if the cuts in text books are to be taken as a guide. Possibly these cuts represent the pathological specimens after removal, no longer distended with blood, and thus fail to represent the condition existing during life.

The treatment as applied was successful. As the vein involved was a vena comes it was possible to obliterate this entirely, had it

been the single vein usually found at this level, the arterial opening could have been sutured through the sac incision and the latter been closed without occluding the vein. Or the two vessels could have been severed from each other and each sutured separately. (See illustrations in Bickham's article, May, 1904, *Annals of Surgery*.)

From what we know of the course of arterial varix allowed to run its course undisturbed it might have been safe to leave the condition without operation. However, the thinness of the sac and the considerable distention following each systole make me feel that without interference the condition would probably have become aggravated so as to require ultimate interference. Again, the mental attitude of the patient, who was seriously disturbed by the throbbing in his thigh, adds another factor in the justification of this operation, the danger of which was small.

The result confirms the favorable impression of the endo-aneurismal suture in general made upon me by a previous case, one of popliteal aneurism reported in the Jan., 1905, *Annals of Surgery*.

DISCUSSION.

DR. PARHAM. I think the result of the operation justified the expectation. I have had no experience with Matas's operation in this particular condition. Last year, in a discussion before this Society, I took occasion to commend the operation as a great advance in surgery. While I cannot, from personal experience, say anything as to this special application of this procedure, it is nevertheless an operation of great importance to the surgeon. The essential feature of the operation is the suture of the openings in the sac. Modifications of the procedure are of secondary importance and intended to meet the indications of special cases.

Removal of Hemorrhoids by the Angiotribe Method.

By DR. S. P. DELAUP, New Orleans, La.

The method which forms the subject of this article, in its details, has been elaborated by my friend and colleague, Dr. Chassaig-nac, and were we to follow the custom of our northern confreres, it should be called the Chassaig-nac method. It has given much sat-

isfaction, and from its simplicity and the freedom from unpleasant complications, in the after-course of the cases thus treated, and the certainty and security of the healing which has followed, seems to be almost ideal in its character. Doubtless similar methods have been used by other surgeons, but I do not know of any full and systematic description of the procedure as a whole either in periodical or text-book literature. It is true that the old methods of removing hemorrhoids by ligation, or by the clamp and cautery method, have been quite efficient in securing the cure of the disease in all ordinary cases of hemorrhoids; nevertheless, to the critical surgical mind a fair objection to each of these methods can be raised.

In order to demonstrate the superior advantages of the angiotribe method, let us weigh the advantages and disadvantages of the usual operations. It is needless to add that each operation has its supporters, and doubtless always will have, as lapse of time has brought theory and practice no nearer together.

The complete excision of the so-called pile-bearing segment of the rectum, in cases of very aggravated hemorrhoids, the method of Whitehead, is complete as a surgical procedure. The diseased structure is removed entirely; the parts from which the disease is excised are brought together in good apposition, and a primary union is accomplished. In certain cases, where the lower segment of the rectum is practically converted into a continuous, circular, cavernous tumor, mixed with inflammatory products, this method can be resorted to; but by experienced hands only, for the operation is extensive, severe, and even dangerous. In debilitated, anemic, and old patients the method is contraindicated owing to the severe hemorrhage which usually accompanies the operation. Another objection, which holds good for all the cutting methods, is the possibility of wound infection, as the work is done in all cases in an infected field, owing to the impossibility of perfectly cleansing the parts to be operated upon, or of preventing the subsequent access of fecal materials from above.

The old method by ligation, made popular in this country by Mathews of Louisville, presents many points in its favor; it is simple, easy of performance, effective, and requires no special paraphernalia. Against it, however, we must say that it is the most

painful, confines the patient to bed for a considerable time, is followed by dysuria, and is not free from danger of hemorrhage, statements to the contrary notwithstanding.

The introduction and adoption of the clamp and cautery method marked an improvement in the surgical technique of operations for hemorrhoids. In our hands the method has been most satisfactory, and next to the angiotribe method is our method of choice.

It may be noted here that if the clamp is not applied with enough force there is the possibility that some of the tissues grasped in it may slip out after the cutting away of the pile mass; this should be thought of in the application of the clamp and the necessary strength of blade and force of grasp should be secured by the surgeon. Most pile-clamps now on the market are unsatisfactory for the reason that they do not exert equal pressure along the entire length of the blades. Owing to the vertical direction in which the blood vessels of the lower rectum descend in the submucosa to the margin of the anus, the main artery of the compressed mass is found in its upper edge, the part least compressed by the clamp. To obviate this objection, latterly, I reverse the direction of the clamp, so that the highest portion of the pile mass is next to the screw of the clamp.

Whatever the method of operating, the antecedent preparations are the same, viz.: the emptying of the bowel 24 or 36 hours previously by a cathartic, and the washing out of the lower bowel by a copious enema not later than six hours before the operation, so that the rectum is thoroughly empty when the parts are subjected to surgical interference.

The method which I now describe is applicable not only to the general cases of moderately severe hemorrhoids, such as most frequently apply for surgical relief, and to which the old methods of ligation or the clamp and cautery were peculiarly applicable and most frequently resorted to, but also to the rather frequent cases of large, circular and protruding hemorrhoids, for which the Whitehead method is unnecessarily severe and extensive.

The technique of the angiotribe operation as performed under spinal analgesia by Dr. Chassaignac and myself, is as follows: The patient, having been previously prepared and the spinal injection made, is placed in Sim's position. The sphincter is gradu-

ally and thoroughly divulsed by making pressure with the thumb or fingers first in one direction, and then in another, or with the Cook's speculum. The hemorrhoids are then exposed by everting the anus, and their number, size, and location noted. The next step is also common to all methods, determining how many of the hemorrhoidal masses, and what ones should be removed. This is best effected by firmly grasping each tumor with hemorrhoidal forceps, and making traction so as to put the parts at its base well upon the stretch. The angiotribe—Thuminn—is now adjusted; it will not only enclose the whole of the pile, but will reach up to the normal mucous membrane above, so that its vascular supply is wholly controlled. Practically, the situation is the same as when the surgeon applies the clamp for the clamp and cautery operation. The portion of the pile that protrudes beyond the angiotribe is now cut off flush with the angiotribe by knife or scissors, just the same as in the cautery operation. The angiotribe is allowed to remain for four or five minutes, according to the size and condition of the pile. Pending the compression the excised tumor flush with the angiotribe may be touched with a pledget of cotton, saturated with pure carbolic acid. The angiotribe is then removed and reapplied as often as necessary; the most aggravated case never requiring more than four applications.

When the procedure has been completed there results a well and satisfactorily secured wound; the wound surfaces are in apposition, the peri-anal skin redundances have been in great part removed, and the traces of the operation then present to inspection two, three, or more small compressed wound lines radiating from the anus. These are gently returned within the sphincter and held in by a firm wedge-shaped gauze compress applied over the anus and firmly secured in place by a well adjusted T-bandage. The patient is then placed in bed.

The rectum should not be irrigated nor any instrument introduced after the operation has been completed, from fear of tearing open the compressed wound. If the compression has been thorough, and if no dressing, packing, or tubing of any kind are placed in the rectum, there will be comparatively little, if any, after-pain.

The subsequent treatment does not differ from that commonly employed in any method of dealing with hemorrhoids. A hypo-

dermic injection of morphin $\frac{1}{4}$ or $\frac{1}{8}$ grain is usually given after the operation, and the bowels are kept quiet by moderate doses of camphorated tincture of opium until the third day, when a laxative is administered, the first movement produced thereby is rendered easy by the administration of an enema of six ounces of olive oil. The patient is allowed up on the fifth day or preferably at the end of one week.

In our opinion, the crushing operation with the angiotribe should take precedence over the ligature or clamp and cautery methods, because it (1) is equally as radical, (2) can be performed as easily and quickly, (3) is less likely to be followed by hemorrhage or stricture, (4) vesical disturbances are less frequent, (5) after-pain is not so great, and (6) recovery is more rapid.

The simplicity of the method and its completeness as a surgical procedure have commended it to our judgment, as well as the satisfactory after-course and the completeness of the restoration of the parts to their original integrity.

The above assertions are based on a seven years' experience with the method, and the successful treatment of one hundred and fourteen cases.

DISCUSSION.

DR. CHASSAIGNAC: Although the doctor has so concisely and completely explained the method, I shall say a few words about the results obtained. The operation for piles is one so often done that it is highly important to decide which is the best operation for the patient. The doctor has briefly enumerated the chief advantages, from the patient's standpoint; less suffering, both immediately after the operation and during the after-treatment; more rapid convalescence, which is exceedingly important to most people; and, I think, the assurance of as permanent results as it is possible to obtain. There is much less annoyance, as, for instance, much less frequently is there retention of urine after this operation than any other we are acquainted with. I speak knowingly, because I have been performing these operations for something like twenty years, and have had ample opportunity, both in the hospital and in private practice, to test the results of the various ones. With five or six years experience with this operation I am prepared to corroborate what the doctor says in his paper.

DR. PARHAM: I can testify from personal experience as a patient of Dr. Chassaignac's to the effectiveness and the good results of the operation. I think it is an excellent procedure. I want, however, to say a few words about the suture methods, an operation suggested a few years ago by an English surgeon and recently elaborated by one of our own surgeons. The pile is clamped and cut off close; the suture is begun above, where the vessel enters the hemorrhoid, tied and then run on down over and under the clamp as a continuous suture and tied below after carefully pulling up the slack. While I like the operation as done by Drs. Delaup and Chassaignac with the large clamp, I mention the suture-method as ideal in many cases.

DR. THIBAUT: It has been my pleasure to assist Dr. Delaup in some thirty of these operations on hemorrhoids, and I would like to add my voice in commending the method. The lack of pain after the operation is an important factor. A point brought out in the paper, but which will bear repetition, is that it is important that the greatest pressure be brought to bear on the highest point of the hemorrhoid, as this precludes any danger of hemorrhage.

Orleans Parish Medical Society Proceedings.

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MEETING OF NOVEMBER 9, 1907.

DR. J. D. WEIS read a paper entitled

A Rapid Method of Demonstration of the *Spirochæta* *Pallida* for Diagnosis.

Before giving the method for diagnosis, it may be of practical advantage to superficially review the whole subject of the *Spirochæta*, or *Treponema pallidum*.

The now famous publication of Schaudinn and Hoffman, on

the occurrence of a spiral shaped organism in syphilitic lesions, was published in 1905. Since when, many hundred observations, by men in all countries, seem to justify the statement of Manahan, that the *Spirochæta pallida* may now be considered as the true cause of syphilis. It is true that all the necessary rules for the identity of an etiologic organism have not been fulfilled, as for example the pure culture, still the finding of the *Spirochæta pallida* in acquired and experimental syphilis, in primary, secondary, and lately in tertiary lesions, in all syphilitic efflorescences and in the blood, seems enough to satisfy most authorities who now look upon this organism as the cause of syphilis.

To strengthen this statement, it has been found that the *Spirochæta pallida* occurs alone without other organisms of any sort in a large majority of deep lesions of syphilis, i. e., in lesions which have no connection with the exterior of the body. It is also found alone in experimental lesions.

The supposition that this organism has nothing to do with syphilis. that it is an artefact, a nerve fibrilla or tissue fibre, as put forth by Thesing, Schultze, Friedenthal, and Saling, has been entirely disproved by the work of Levaditi, Hoffman, Mühlens, Giemsa and others, i. e., by special stains. The original observation of Schaudinn and Hoffman was confirmed by Metschnikoff one month after its appearance. Metschnikoff and Flexner have since found the *Spirochæta pallida* in monkeys, which had been successfully inoculated with syphilis.

The *Spirochæta pallida* has an extremely delicate contour, it is about 4 to 14 m long and .25 m thick. The spirals are regular, usually 6 to 10, but 24 turns have been observed. Many involution forms have been described. The Y shaped ending of the spiral is a frequent finding. I have observed this constantly. Schaudinn observed flagella-like prolongations at the end of the *Spirochæta*, which he claims stain by flagella staining methods, and so makes the statement that the *Spirochæta pallida* has flagella. Krystalowicz and Siedlecki claim these to be prolongations of the organism itself, pure and simple.

Until we can have observed the life cycle of the *Spirochæta pallida*, according to Neumann, it will be impossible to classify it, as to whether it belongs to the protozoa or the bacteria. Many mor-

phologic and biologic facts speak for the bacterial relationship, Koch, Laveran, Thesing and others hold this view, but Schaudinn himself, Herxheimer, Keysselitz and others claim the protozoa nature. No culture of the *Spirochæta* has ever been made.

The organism is found in the primary and secondary stages, in both open and closed papules, efflorescences and exanthems, in mucous plaques, in lip and eye affections, in glands and in the spleen and blood. In the tertiary stage, fewer observations have been recorded. Doutrelepon and Grouven report positive findings, as does Tomaszewski. In hereditary syphilis many cases have been reported in which the *Spirochæta* has been found in the liver, spleen, kidneys, lungs, suprarenals, blood, cerebro-spinal fluid, inguinal glands, pemphigus blisters, urine and bile.

The number of organisms present in a given case vary; often they may be very numerous, and then again, only a very few or one or two in a specimen. Manahan found them most numerous in mucous patches. In tertiary conditions they are often very sparse, one only being found in a given case, according to Lehmann. Metschnikoff and Roux, in 1905, succeeded in inoculating and transferring syphilis in the chimpanzee, and later, in the lower apes as well. Any part of the body was susceptible in the anthropoid ape, but in the lower orders the eyelids and genitals only were successfully inoculated. The very young apes were often difficult of infection, only subcutaneous and intraperitoneal infections were possible; the skin never. It seems only necessary to have enough material for inoculation to be successful in the horny epidermis of the older apes. Other animal experimentation seem to have been negative. Finger and Lanstiner have found an interesting condition as to immunity and the immunizing of animals. These observers report after inoculating an ape or man successfully, i. e., obtaining a primary lesion, that if they re-inoculated the same animal with a new material, a new lesion would appear, only, however, up to the fourteenth day, not after. A shorter incubation, then, for the second inoculation. An active immunization by decreasing the virus has failed of results. Also passive immunization has not given results.

Many methods have been suggested for the demonstration of the *Spirochæta*; as for instance the aspiration with a Pravaz syringe, of

papules or glands. In blood work, it is necessary to mix at least 1 c. c. of blood with ten times as much of (1/3%) acetic acid solution, and then to centrifugalize the corpuscles.

Giemsa's stain is most commonly used; this method of staining requires eighteen hours, however, and stains the *Spirochæta* very faintly.

Before giving the practical rapid method, it is necessary to draw attention to the presence about the genitals of a *Spirochæta* most commonly seen there, and which is not to be mistaken for the *pallida*, i. e., the *Spirochæta refringens*. This organism is broader, has longer and fewer curves, and stains more intensely than the *pallida*. There is no difficulty, says Manahan, in differentiating between the *pallida* and the *refringens* after one has made many observations, with which statement I agree.

The method, which is that of Manahan, is as follows:

On experimenting with Wright's blood stains, Manahan found the organisms could be much more intensely stained in a period of five minutes than with Giemsa's stain of 18 hours. This rapid and more intense method of staining is a great advance as it saves time and makes the recognition of the organism comparatively easy. The application of Wright's blood stain to the staining of smears obtained from syphilitic lesions is as follows: the stain is prepared according to the directions given in Mallory and Wright's *Pathological Technique*, page 371.

Five-tenths of a gram of the dried methylene blue eosin precipitate is added to 100 c. c. of pure methyl alcohol, Merck's guaranteed reagent, and after a concentrated solution is obtained the solution is filtered. Take 30 c. c. of the filtrate and add 10 c. c. of pure methyl alcohol.

This solution is now ready for use and should be kept in a tightly-corked bottle to prevent evaporation. If evaporation takes place, a precipitate will form which will so obscure the specimen as to prevent the recognition of the organism.

The film is covered drop by drop with as much of the staining fluid as the cover-glass can conveniently hold and allowed to remain one minute. Water is then added drop by drop, until a metallic film appears on the surface. In Manahan's experience it was found that four drops gave the best results. The stain is now

kept on for five minutes and then washed in water. The amount of water used should be just enough to remove the staining fluid. On examination the red corpuscles should be a pale blue and the *Spirochæta pallida* purple. If the differentiation is carried any further with water, the *Spirochætæ* do not stain as deeply. The cover-glass is dried over the flame and mounted in balsam. Preparations should be made with great care in order to prepare thin and evenly distributed smears. The method of obtaining the materials depends upon the seat and character of the lesion. In chancres, where ulceration has taken place, the following method has been found most suitable: the lesion is washed with water and gauze, removing as much of the necrotic tissue as possible. At the junction of the ulcerated area with the indurated margin, a small incision, 4 *m.* long and 2 *m.* deep, is made with a tenotome. The first few drops of blood are removed with gauze, and the bleeding checked by pressure. Then with the back edge of the tenotome, a small amount of material from the bottom and sides of the wound is removed. This material which will be blood tinged serum, is then placed on a $\frac{7}{8}$ -inch cover-glass, which has been carefully washed in absolute alcohol and ether, and a smear made in the same manner as you would prepare a blood smear. In mucous patches two methods are employed to obtain the material. The selection of the method to be used depends upon the character of the lesion. In fissures of the tongue or mucous patches which have gone on to ulceration, the lesion is washed with gauze and water. The necrotic material is then removed with a small blunt curette. After the bleeding has stopped, the base of the fissure or ulcer is gently scraped with the curette. The material thus obtained is placed on a cover-glass and a smear made. In early mucous patches before ulceration takes place, the procedure is as follows: the edge of the diseased mucous membrane is lifted with a tenotome, and from the wound a drop or two of the blood-tinged serum is placed on a cover-glass and a smear is made.

Preparations from skin eruptions may be made by one of the two following methods: A bleb is made by the application of strong ammonia over the skin lesion. When a bleb is formed, remove the serum with a platinum loop and make a smear. According to Manahan, this method has not been satisfactory. Another

and more satisfactory way is to scrub the skin thoroughly with alcohol and water. Then select a well developed macule or papule and scrape off the upper layers of skin with a knife until a bloody serum exudes. A good sized drop of bloody serum is allowed to form. Remove this drop by touching it with the surface of a cover-glass. The drop will adhere to the cover-glass and a smear is then made.

Following these methods, I have been able to find successfully the *Spirochæta* eleven times in twelve cases. Ten of these observations were made in Boston, with Manahan, two here. The negative finding has never proven to be syphilis.

After what has been said and quoted it may seem presumption on my part to make this further statement, that I believe the *Spirochæta pallida* to be the cause of syphilis and that its presence in a given preparation means that the patient has syphilis.

CONCLUSIONS.

1. The *Spirochæta pallida* is the cause of syphilis.
2. That, by using Manahan's rapid method of staining, we have a means of making a positive diagnosis of syphilis from the primary lesion in five minutes, and that we are therefore justified in beginning treatment before the secondary symptoms appear; and that, in the hands of a careful observer, with some experience, there is not the slightest difficulty in differentiating the *Spirochæta pallida* from all other *Spirochætæ*, and especially from the "refringens" with which it is most often associated, or may possibly be confused.

DISCUSSION.

DR. LARUE: I think the man who first thought the *Spirochæta* to be the true cause of syphilis, was Drune, as far back as 1837. They were not able to differentiate at that time. I remember a case in which I was present as a student in one of the hospitals in Paris, when a discussion arose between Péan and Fournier. Of course, at that time there was no such method of differentiation. I was then assigned to Dr. Péan's class. He was deliberating about operating on a man for cancer of the thigh. Fournier, passing by,

said to Péan, "I suppose you are going to operate," and Péan answered, "yes, we are going to operate for cancer of the thigh." Fournier, asserting that the case was syphilis, you can well imagine what a sensation it created. However, it was decided at that time that Péan would not operate. The patient was put on anti-syphilitic treatment and he got well. I think it is a very important finding.

DR. HALSEY: I rise to ask for information from Dr. Weis. In reading of this spirillum we have seen quite frequently that it has been found in cases where there was no syphilis. I would like to ask the doctor how these false results are to be explained.

DR. AMÉDÉE GRANGER read a paper on

Plastic Skiagraphy; Its Advantages.

Plastic skiagraphy is a subject of very recent origin, and is considered in Europe one of the most important steps in radiography since Roentgen's discovery. Several operators had unsuccessfully attempted to make X-ray negatives with plastic effects, i. e., with the bones and soft parts in relief, which had never been obtained except by means of stereoscopic reproductions when, in March, 1906, Bela Alexander, a country practitioner living in an obscure part of Hungary, published a method of obtaining plastic X-ray photographs. The method as recommended by him is long and tedious, and requires the taking of four plates before the finished print is made.

In a highly interesting article in the August 31, 1907, number of the *Journal of the A. M. A.*, Drs. Stern and Rosenberg describe a modification of Alexander's method. Briefly, their method, which is simpler than Alexander's, is as follows:

A careful exposure is made with two tubes on a specially prepared double-coated X-ray plate. The first tube used for the double exposure is a very soft one and without changing in the least the relations between the tube and the object and the object and the plate, a second exposure is given with a hard tube.

The plate is then developed in the usual manner and must be quite dense. This first plate is the negative. A positive is to be made by direct contact in a printing frame. The positive must be equal in density and contrast to the negative.

The plates are now placed back to back and accurately registered. They are moved one over the other until the lights and shades of the negative overlap closely the corresponding shades and lights of the positive. They are then bound permanently together. A print must now be made with the paper in contact with the positive plate. The printing of a third plate, "the plastic," can only be made with parallelled rays of light which must strike the plate at an oblique angle.

When developed the print (third plate) will show beautifully "plastic" effects and the soft parts usually stand out in wonderful clearness, the more perfect the first plate the better the plastic.

French radiographers have obtained just as good "plastic negatives" by the following method:

A diapositive is made from a dry X-ray negative in the usual manner, i. e., the film side of a plate is placed against the film side of an X-ray negative, and with the latter turned towards a dim source of light, an exposure of a few seconds is made. The exposed plate is then developed, fixed, washed and dried in the usual manner.

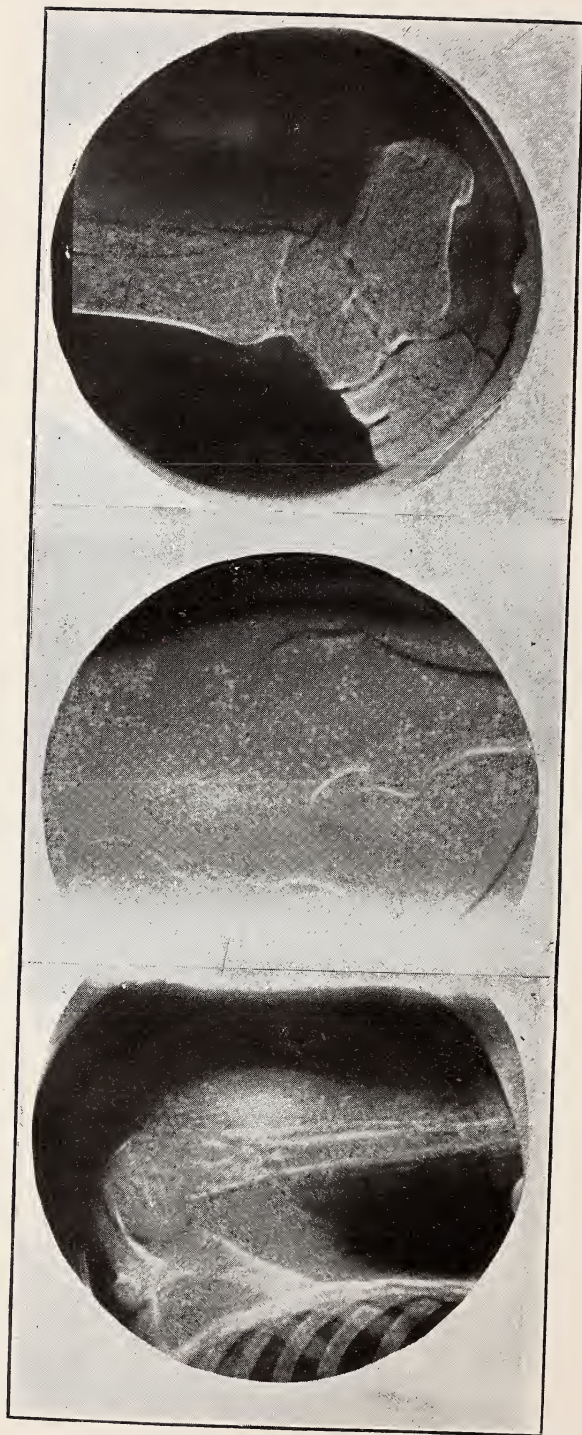
The negative and the diapositive thus obtained, with glass sides in contact, are held tightly together by the means of strips of gummed paper glued around their edges.

The "plastic negative" is made from the above by placing a photographic plate with its film side held tightly against the film of the negative and exposing the whole to a dim light for a few seconds. The light passes through the film of a diapositive, the glass of the diapositive, the glass of the negative and the film of the negative, before it reaches the photographic plate. After development, fixing and washing, the plastic negative is obtained.

From the latter, any number of positives on paper (plastic X-ray photographs) can be made.

The advantages of the last method become at once apparent. The process is simpler, but much more important than that is the fact that a "plastic negative" can be made from any good X-ray negative, and not only from any specially prepared and taken X-ray negative. This is of great practical importance, as we shall see presently.

As far as I have been able to ascertain, plastic skiagraphy has



3. Osteomyelitis, shaft of humerus.
4. Normal hip.
5. Normal ankle.

DR. GRANGER'S PAPER.

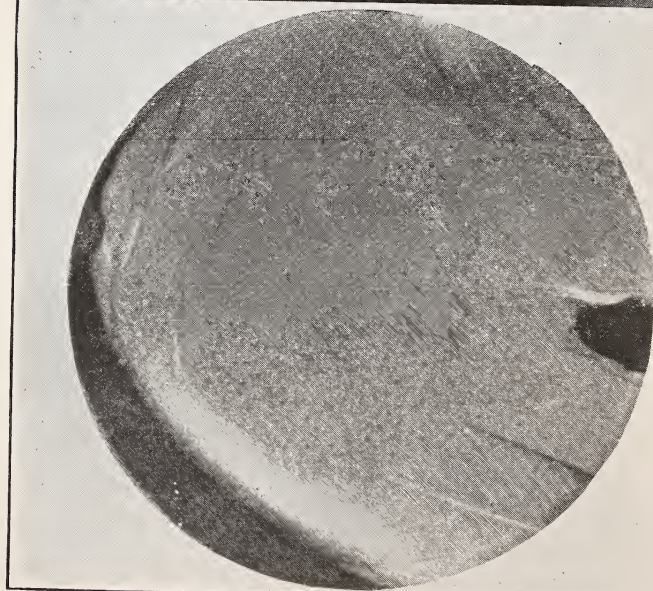
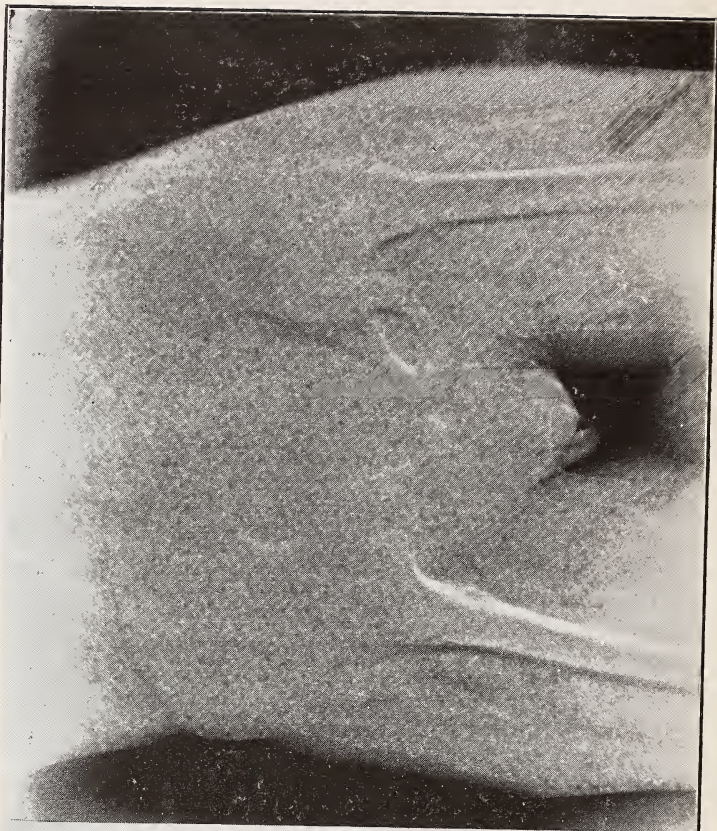


Fig. 1. Osteosarcoma, head of humerus.



1. Osteosarcoma, head of humerus.
 2. Tubercular Coxitis right hip.
- DR. GRANGER'S PAPER.

only been used to show a good X-ray negative to better advantage. This although very interesting and furnishing beautiful plates, has no practical value. With the facilities afforded me at my department at the Charity Hospital, having a collection of over 1,000 X-ray negatives, filed and carefully indexed, I decided to make a number of plastic skiagraphs of various pathological conditions, with a view of ascertaining what, if any, *practical diagnostic value* "plastic skiagraphs" have. The French method is the only one which I could use, since the negatives were already made.

If they have no diagnostic value not possessed by the ordinary X-ray negatives, then from a practical viewpoint, and in the average case, we are hardly repaid in the future for the time, trouble and expense necessary to make them.

If, on the contrary, they have such an advantage, then a skiagraph can be made in the ordinary manner, and if necessary to make a more accurate diagnosis, a diapositive can be made from it and both with their glass sides in contact the negatives turned toward the operator, held before an ordinary light, and examined. Or, if desired, a "plastic negative" can be made in the manner already described.

It is the net result of this investigation which I will present to you to-night, and in each instance I will show first the ordinary X-ray negative, then the "plastic negative" made from it.

PLATES EXHIBITED.

Fractures:

Femur—Astragalus—Fibula—Spine.

No information gained in fractures of the extremities. Very much more can be learned by the usual method of taking two views with the part in positions which are at right angles to each other. The fractures of the astragalus and of the spine were more plainly seen, because the bones were in relief. We advanced the opinion that the method may be found of use in diagnosing doubtful cases of fractures of bones which can only be skiagraphed satisfactorily in one position, for example, the spine, hip, shoulder and ankle.

Dislocation:

Shoulder.

Here the empty glenoid cavity is shown in relief beautifully, but

no information is furnished as to whether the head of the humerus is dislocated forwards or backwards.

Foreign Bodies:

Bullet in the great trochanter—Flattened bullet lying in front of the neck of the femur—Bullet lying in front of the cervical vertebra—Bullet in head—Tracheotomy tube in position.

In each instance the foreign body is shown in relief, but no idea as to its depth or its position in front or behind the bone, is furnished. We believe, however, that by comparing the case with the bullet in the bone with the two cases in which the bullet was known to be in front of the bone, we are helped to state more positively that the bullet in one case is in the bone, and in the other two cases outside of the bone, but we must add that we had already made this diagnosis from the ordinary skiagraph, and I therefore reserve my opinion on this point until I have an opportunity to test it more fully in other cases.

Disease of Bone:

Cyst of the radius—Syphilis of the radius—Syphilis of the femur—Tuberculosis of the tibia—Osteomyelitis of the humerus—Osteosarcoma of the humerus—Osteosarcoma of the femur—Arthritis deformans of the knee—Arthritis deformans (hypertrophic) of the hand—Tubercular coxitis of the hip (three cases, showing three stages of the disease in children of three to five years).

Here we find "plastic skiagraphy" of great help, in some cases showing a great deal not seen in the ordinary skiagraph. The bone being in relief is better distinguished from the soft parts. The extent of the disease and of bone destruction is better and more fully seen. The condition of the soft parts is also better brought out. Their involvement in osteosarcoma (fig. 1), the contracted muscles in the case of tubercular coxitis in the first stage (fig. 2). In necrosis (3) we get a clearer idea of the bone construction, of the sequestra, their size and the condition of the soft part.

Normal Plates:

Hip—Knee (anterior-posterior view)—Knee (lateral view)—Ankle—Thorax.

As already stated these show to better advantage.

CONCLUSIONS.

From a careful and conservative study of my work thus far in "plastic skiagraphy", I draw the following conclusions:

1st. That "plastic skiagraphy" *gives* beautiful relief effects not obtainable by ordinary skiagraphy. A good plate is shown to better advantage. The study of the normal parts, especially the joints, *will be made easier*.

2d. That "plastic skiagraphy" *will assist* in the diagnosis of doubtful cases of fractures in parts which can only be skiagraphed in one position and *may also prove valuable* in helping us to decide in cases of foreign bodies, whether these are in the bone or outside of it.

3d. That in diseased conditions of bone "plastic skiagraphy" *does furnish us with valuable information as to the extent and nature of the pathological process and the condition of the surrounding soft parts*. Furthermore, that it *may help us* to make a *differential diagnosis* between the various diseases of bone in their early stage.

DISCUSSION.

DR. GUTHRIE: I want to say beforehand that I am not trying to be discourteous or ugly. We are here as friends, and it is our duty to be frank with one another. I most assuredly do not believe there is anything of value in this method. I have been exceedingly interested in seeing this exhibit. The negatives mean very much more than these ingeniously prepared pictures. I consider the perspective which they show as false perspective, which does not exist in a shadow picture as X-ray negatives are.

DR. HATCH: I would like to ask Dr. Granger if the technique used in making all of the plastic pictures was the same. The reason I ask is that some of the plastics taken from poor negatives are good, and some of those taken from good negatives are poor. One of the negatives of a hip joint shown was very good, while the plastic from it was not. One would naturally think that a good negative would make a good plastic and that the opposite would hold true also. Some of the plates may have become stained by careless handling.

DR. HALSEY: I enjoyed these pictures very much indeed, and

I think it may be of great value in teaching and demonstrating to inexperienced students. These pictures look more like real bones than do the ordinary skiagraphs.

DR. LARUE: There is certainly one point of importance to the clinician. A case of osteo-sarcoma for instance. One who saw this case was quite positive in diagnosing it as such, while another just as positively asserted that it was tubercular arthritis. This man I am going to operate on Monday; the point is to decide whether it is tubercular or sarcomatous. I must say that I was inclined to believe it was sarcoma, and I am now positive after having seen the skiagraph of the limb, that the man has osteo-sarcoma of the femur and nothing tubercular about it.

DR. GRANGER (in closing): I am not of the opinion that X-ray negatives show more in any instance than a good plastic negative, and I am certain, on the other hand, that the latter has an immense advantage in the study of pathological processes of bone. In these cases the bone being in relief is better distinguished from the soft parts, and the extent of the disease and of the bone destruction is better and more fully seen. The condition of the surrounding soft parts is also more fully seen.

Dr. Halsey brought out a very good point, that of the value of plastic skiagraphy in teaching. This emphasizes what I have said above, that it brings out normal joints to better advantage. In answer to Dr. Hatch I will state that the best plastic negatives can only be made from faultless negatives. If the negative has any defect even such as would not impair its usefulness because its image is good and there is good contrast and yet the plate be mottled or stained generally the plastic will be bad—a method which magnifies what is good must equally magnify what is bad.

MEETING OF NOVEMBER 23, 1907.

DR. HOMER DUPUY read a paper entitled

Further Experiences with Antidiphtheritic Serum in Nasal Diphtheria.

In a paper entitled "Primary Nasal Diphtheria", read by me before this Society in January, 1906, I made the following remarks:

"And now we must clinch the question of serum treatment, for

I believe this disease which in spite of our best efforts runs along for at least three weeks can be shortened by the administration of the antitoxin. I have only recently begun to realize my own inconsistency and that of the profession, as a whole, on this important question. We judiciously apply it on the mere suspicion of diphtheria in the throat, yet we hesitate to inject the serum in the nasal form, fortifying ourselves with the belief that in this region the disease is always innocuous. Of great importance is the knowledge that apparently mild cases of diphtheritic rhinitis are sources of potential danger to their immediate surroundings, to communities, and to institutions where large numbers of children are congregated."

Further experience and clinical observation have but served to strengthen the position I took then, viz., that it was a grievous error not to administer the antidiphtheritic serum in every case of primary nasal diphtheria.

It is clinically demonstrable that antitoxin has a resolvent action on the diphtheretic membrane, wherever situated. Its gradual, yet certain disappearance, means less infected secretions and diminished toxin absorption. This applies with equal force to primary nasal diphtheria, which is characterized by a very free and constant discharge, the microscope showing it to be exceedingly rich in infective material. The contagiousness, therefore, of this form of diphtheria is scarcely less than in the throat manifestations.

We must recognize two forms of diphtheritic rhinitis, the benign, showing little disposition for the membrane to extend to neighboring parts and with the slightest, if any, systemic reaction. We have also to reckon with a graver form, in which we find a severe systemic intoxication, which can and does lead to a fatal issue. I have given the serum in both types. In the former to cut short the course of the affection; in the later, to antagonize an alarming toxemic absorption.

I have selected two typical cases from my records. They tell their own story.

CASE 1. W. M., white male, aged 10. Presented membranous formations in both nasal chambers, causing complete nasal obstruction, frequent epistaxis since one week, profuse acrid nasal

discharge, causing excoriations over the upper lip and around the anterior nares. Throat and rhino-pharynx normal. Temperature $99 \frac{4}{5}$. No marked systemic disturbance. In fact, the picture suggested a severe, yet innocent head cold. A culture gave positive reaction. The house was duly flagged which greatly alarmed the parents. They sent for both the family physician and myself. I came prepared to give antitoxin, but, unfortunately, consented to dispense with the serum, as this was considered a mild type of diphtheria. Persistent local treatment was carried out, which seemed to produce only the lightest impression on the membrane. On the fourth day the patient gave evidence of severe systemic intoxication, which manifested itself by a profound general depression and a very rapid heart. There was marked stupor. This symptom complex indicated toxemia. Four thousand units of antidiphtheritic serum was given at once.

In about 12 hours our patient emerged from this prostration into his natural and normal self. The rapid resolvent action of the serum on the hitherto resistant membranous formation permitted a culture to be taken on the tenth day following his first visit to me, which gave negative results. The behavior of this case amply demonstrates that nasal diphtheria is not always inocuous. The serum saved the situation and notably shortened the course of the disease.

CASE 2. Marguerite S. White female. Aged 4. Seen by me Sept. 23, 1907, presenting a pearly white membrane in both nasal chambers. Copious, mucopurulent blood-tinged discharge. Seemed to have a head cold for over a week. Several attacks of epistaxis. Throat normal. Temperature $98 \frac{2}{5}$. Violent snoring during sleep. The absence of any systemic disturbance rather suggested that I was dealing with a non-diphtheritic membranous rhinitis. As a precaution the case was isolated. Culture revealed the Klebs-Loeffler bacilli. Sept. 24, 4,000 units of antitoxin given. On the next day, some amelioration. Sept. 26, membrane still visible, 4,000 units again administered. Sept. 28, no trace of a membrane, nasal breathing unimpeded. Sept. 29, control culture negative. Discharged cured six days after initial injection of serum.

In this case I purposely abstained from local medication. The result shows that with the use of antitoxin, topical applications

can be omitted. This is a most important gain when we realize how difficult it is to institute a thorough local treatment of the nasal passages in young subjects.

Contrast these prompt and rapid results which I have duplicated in other instances, with the usually observed protracted course of primary nasal diphtheria. This brings me to the very pith of my subject, that the administration of antitoxin reduces the duration of these nasal infections to 6 or 10 days. Microscopic findings show us the persistency of diphtheritic rhinitis. Treittel and Loppel found virulent Klebs-Loeffler bacilli during a period of fifty-five days. My personal observation of four cases in the same family in which separate cultures were kindly examined weekly by Dr. John J. Archinard, showed the bacilli during a period of 30 days. As the children were affected with a so-called head cold a week or more before I examined them, in this particular instance, the disease ran a course of about 40 days. We depended entirely on topical applications for a cure and dispensed with the serum. I have since learned that this was a capital mistake.

In conclusion, once the microscope, which is the only crucial test, demonstrates a membranous rhinitis to be diphtheritic, the logic of serum therapy demands its use in all such cases.

In the benign and milder types, the serum, by reducing the duration of the disease to 6 or 10 days, shortens the period of isolation and protects the community.

In the more severe form it lessens toxemia and minimizes the possibility of a fatal issue.

The very persistency of nasal diphtheria calls for an initial dose of 4,000 units of the serum, which is repeated on the third day, should there be no material improvement. This repetition is all the more indicated if there exists a tendency for the reformation of membranous tissue.

DISCUSSION.

DR. MCSHANE: Nasal diphtheria is rarely if ever fatal. The danger lies in the infection of others, hence any means of shortening the attack or lessening the infection (virulence) demands further and more careful study. The last paper of Dr. Dupuy called attention to the danger of the infection of others. I will

here cite an example: There were two children in one house, one having a peculiar head cold, the other healthy. Microscope showed Klebs-Loeffler. Antitoxin given and cure followed. The other child later develops membrane in nasal chamber. Negative culture. Later I heard of a laryngeal pseudo-membrane in an extraneous case. There was a fusiform bacillus found. I would like to know if a similar bacillus has been found in nasal pseudo-membrane.

DR. BUTTERWORTH: Regardless of the location of the diphtheritic membrane it is a common-sense proposition to make use of antitoxin, notwithstanding the fact that nasal diphtheria is said to be innocuous. The danger to others is always present. He cited the case of a child in which positive results were obtained from the examination of the nasal discharge for a period of 120 days. The doctor wished to emphasize two points: First, that when the antitoxin is used in cases of nasal diphtheria, the percentage of these complicated with otitis media is greatly lower. Second, the use of large doses of antitoxin is not sufficiently appreciated by the general practitioner. Four thousand or more units should be given and this repeated if necessary. As a rule, 4,000 units will give satisfactory results, if given early in nasal, laryngeal and pharyngeal diphtheria; and very often no other medication is necessary.

DR. N. T. McLEAN, U. S. Navy (a guest of the Society): The doctor regretted that he did not hear the first part of the paper. For over a year, while an assistant to Dr. J. H. McCollum, at the Boston City Hospital, South Department, he had an opportunity to follow a large number of such cases. At that time (seven years ago) the average dosage for such cases at that institution was about 4,000 units. It was never found that this treatment diminished the infectiousness of the case. In fact nearly all of the cases of diphtheria that occurred in the measles and scarlet fever pavilions were traceable to cases of nasal diphtheria. The dosage in the nasal type should be very similar to that in all other types, viz.: large initial doses and repeat frequently till the disease is checked. The laryngeal type is, of course, the most serious type, per se. He cited one of the most serious cases he had ever seen, barring the laryngeal type, developing in a patient who had a

large blister over the scapular region, caused in some unknown way, and on whose surface diphtheritic membrane developed three days after admission. The diagnosis was made from the appearance of the membrane and was later confirmed by the bacteriologist. Before closing the doctor strongly emphasized the fact that Dr. McCollum makes use of large doses of antitoxic serum and repeats it frequently enough to quickly check the extension of, and cause the peeling off, of the membrane.

DR. BASS: As to whether the antitoxin may reduce the length of time that the diphtheria bacillus would be found in the pharyngeal or nasal cavities, the doctor stated that experiments in the laboratory showed that the diphtheria bacillus will live in a dilute solution of antitoxin, and although he has no practical experience, he advances the opinion that they would continue to grow in the nose or throat of a patient, where the antitoxin is diluted many more times.

DR. J. J. ARCHINARD said that he was the first patient treated by the antitoxin alone. He submitted himself to inoculation by the commission through Dr. Pothier. He was injected with the Pasteur serum second day, temperature 102 (refused local treatment). Injection repeated. Cured fifth day. Has seen nine hundred cases of all types treated—tonsil, nasal, laryngeal (no membrane). Advocates large doses repeated every twelve hours.

DR. C. C. BASS read a paper entitled

The Present Status of Opsonins and Vaccine Therapy

Only a few months ago the subject of opsonins and vaccine therapy was being discussed probably more than any other subject in medicine, and by many was considered the greatest advance in medicine in many years, and fuller of promise. In the last year or two the work has been taken up by many workers all over the world. It may be interesting and profitable for us to inquire what has been accomplished and what the present attitude is toward the subject.

We must recognize that we are dealing with two different subjects, (1) opsonins and (2) vaccine therapy. The two have been associated because the opsonic theory originated with, and the

treatment of disease by the so-called bacterial vaccines was given wider application by the same men, Prof. A. E. Wright and associates, and at about the same time. The association was strengthened by the rôle this theory made the opsonins play in the results produced by bacterial vaccines. Wright and Douglas' (1 and 2) original opsonic theory may be briefly stated (a) that there exists in the body fluids substances or forces which he appropriately called opsonins, and which prepare bacteria to be taken up by the phagocytes, and without which, with only rare exception, no phagocytosis occurs; (b) that the effect is on the bacteria and not on the phagocytes; (c) that there is approximately the same opsonic power in the serum of all normal individuals; (d) that it is different from and not dependent on certain antibodies or antitropins previously demonstrated, viz.: bacteriolysin, bactericidal substance and agglutinin. Their observations that phagocytosis depends upon the influence of serum have been confirmed by many observers, and all, so far as I know, admit this influence. In 1895, Denys and Leclef (3) expressed doubt as to whether artificial immunity depends upon a modification of the leucocytes according to Metchnikoff's view, and this doubt was further justified in 1897 by Mennes (4).

Wright and Douglass (1 and 2) first unambiguously established the passiveness of the leucocytes and the activity of the body fluids in acquired immunity. Their results were later confirmed by Bullock (5). The application of the term opsonin was questioned by Neufeld and Rimpau (6), and bacteriotropin was preferred; but Wright, being the coiner of this term, as well as opsonin, justly claimed the right to assign to its technical significance. "Bacteriotropic is a generic term for all substances which combine chemically with bacteria, whereas opsonin is a specific designation for the substances which prepare bacteria for phagocytosis."

Dean (7) denied himself the convenience of the term opsonin, though admitting the effect and uses instead of the paraphrase, "the substance in the serum which prepares micro-organisms for phagocytosis."

The question whether the opsonic index is the only one of a series of diverse influences exerted by a single antitrophic substance, or whether it is the specific influence of an independent chemical unit or of a sum of such units is yet unsolved.

Simon and Lamar (25), in 1906, found opsonins in all the large class of vertebrates, the amount apparently falling as we descend the scale; human the highest. They were unable to demonstrate opsonins in muscle tissue, liver, spleen, lymph gland, kidney, intestinal mucus membrane or muscular coats, adrenalin, brain, pancreas, testicle, ovary, cerebral spinal fluid, seminal fluid and milk. There was no relation of amount of opsonins to leucocyte count. They showed that opsonins are intimately associated with globulins and the euglobulin part of serum. Their experiments indicated to them that opsonins are of the nature of ferments.

That opsonins are not the same substance as agglutinin was shown by Bullock (9). While agglutination is inhibited by heating the bacteria to 70° C., their susceptibility to opsonic force is not reduced more than fifty per cent when heated to 134° C. for 1½ hours. He also found no remaining complement like body in the supernatant fluid, after digesting the serum at 0° C., which is the opposite to what is found in studying bacteriolysins. He concludes that opsonins are different from antitoxins agglutinins and lysins. The further fact that there is no agglutinin or lysin for staphylococcus, one of the bacteria most susceptible to opsonic influence, would seem to set at rest the contention that opsonin is identical with either of these.

Wright and Windsor (19) in 1902 showed that (a) normal human blood exerts on staphylococci no bactericidal action; (b) anti-staphylococcus vaccinations do not lead to development of any bactericidal power. The same is also true of agglutinin to staphylococcus; (c) also, successful immunization goes hand in hand with the acquirement of the increased phagocytic power due to increase of opsonins. The same as to bactericidal power has been shown (20) for tubercle bacillus.

The power of a given fluid to opsonize bacteria as compared with that of normal human blood serum is called the opsonic index of that fluid, and a patient's opsonic index refers to the opsonic content of his serum.

The first technic for determining the phagocytosis a blood would produce was devised by Leishman (1) in 1902. Wright and Douglas modified this or built up from it the technic now generally employed. Though they have improved some of the details of their

original technic, and a few others have been suggested by other workers, this original technic has not been changed in any material way. This itself speaks for either the lack of necessity for improvement, or the difficulties encountered. I have recently had the advantage of observing the technic now practiced and taught by Professor Wright and did not learn of any inclination to alter the method devised over four years ago. Essentially it is as follows: Equal quantities of washed leucocytes, bacterial emulsion and serum, are mixed in a capillary pipette and incubated for a definite length of time, usually fifteen minutes. A smear is made and stained and the average number of bacteria per leucocyte ascertained by counting and striking an average. Another one using normal serum is made and counted in exactly the same way and the opsonic index calculated. Simon and Lamar (10) have proposed another technic in which the serum is diluted and the opsonic index calculated by dividing the per cent of leucocytes phagocytizing in the patient's serum without considering the bacterial average, by the number in the normal control serum. Knorr (28), working under Simon's direction with staphylococcus serum, threw considerable light on some questionable points in technic and the relative value of the Wright and Simon technics. He found they gave approximately the same values. The strength of the emulsion did not seem to influence the opsonic index as much as would at first be supposed. The stronger emulsion gave less error. Preservation with thymol, chloroform and by boiling, did not reduce the opsonigability of the bacteria. Lysol in $1/4$ of 1° solution did reduce it about 20° .

Jeams and Sellards (16) decided, on reviewing their technic, that by counting 300 cells they could obtain indices with a limit of error not greater than $3/10$. This would be of no service in diagnosis or treatment, they think. To count enough to give accurate figures would remove it from clinical application. They are not sure the opsonic content does not considerably vary in normal individuals. They conclude their limit of errors are so wide apart as to render the method inapplicable. Russell (16), in the Biological Laboratory of the Medical Department, U. S. Army, studied specificity of opsonins by absorption. He found many bacteria and even guinea pigs eurythrocytes would remove the opsonin almost wholly

from normal serum by absorption; but much specific opsonic effect remained after any amount of saturation and absorption, in an immune serum. He was able to explain the quite opposite finding of Bulloch and Western (17), who worked with staphylococcus and bacillus pyocyaneus by demonstrating much spontaneous phagocytosis with bacillus pyocyaneus. Their work warrants the conclusion that there is a normal serum, a common opsonin and little specificity. On the other hand, in immune serum, there are also specific opsonins. An important remark in their paper is that phagocytosis ceases in normal rabbit serum when diluted 1 to 8 to 1 to 16 whereas the serum of rabbits immunized to bacillus thphosus causes phagocytosis in dilutions up to 1 to 1,000, would tend to confirm Klein's dilution technic and it would strengthen the opinion, too, that probably a practical technic can be built up on these lines which would show such a great variation from the normal, that the error would be unimportant.

Moss (16) tried the influence on opsonins of staphylococcus vaccine on rabbits, using both living and killed cultures. His opsonic index technic was faulty, as he himself showed, in that he only counted fifty cells. He found later that by counting 200 cells he reduced his variation due to counting to 10%. His highest opsonic index in vaccinated rabbits was 5.70, next 3.55, using human serum as control. A control uninoculated rabbit once showed 2.75. His conclusions are (a) no high degree of opsonic immunity, such as is possible in antitoxic and bactericidal immunity, can be produced in rabbits by ordinary inoculation procedures with staphylococcus aureus; (b) none of the present methods of estimating the opsonic contents of the blood seems sufficiently accurate to be of practical value. He concludes by saying: "It seems important that further efforts should be expended in hunting a reliable technic for clinical purposes, rather than continuing to pile up statistics which are so inaccurate as to be misleading." With this I quite agree.

Klein (17) inoculated rabbits subcutaneously with typhoid bacilli and studied the opsonic bactericidal and agglutinating power of the serum. He used a technic by which he determined approximately the dilution at which phagocytosis was not induced by the serum. This technic, I must say, though far too long to have prac-

tical application, certainly seems to me to give a far more correct index of the opsonic content than any other I have seen suggested. He found the opsonic and bactericidal substance to increase at about the same rate. The agglutinin increased much more slowly. At the end of 27 days of immunization by increasing doses of typhoid bacilli the opsonic power was not abolished until a dilution of about 1 to 3,000 was reached; bactericidal power about 1 to 2,600, and agglutinating about 1 to 500. Control rabbit's blood would not opsonize if diluted even to 1 to 20.

Showing the contrast between this and the Wright technic, the opsonic index by this last method was on three occasions respectively 1.65, 1.04 and 0.82. The last one on the day when it showed in a dilution of 1 to 3,000 by Klein's technic. He also showed that the increase was due to specific or immune opsonins.

This question of specificity of opsonins has been pretty well worked over. McFarland and L'Engle, in a paper read in the section in Pathology and Physiology of the last meeting of the A. M. A., gave the results of some experiments on rabbits immunized with human erythrocytes and with yeast, tending to show both common and immune opsonins in immune serum. Their findings quite agree with those of Hektoen (31), demonstrating both common and specific hemopsonins. Hektoen (32) apparently was the first to show that phagocytosis of red blood cells was controlled by opsonins or hemopsonins.

Roth and Floyd (18) found opsonins thermoslabile at 60 C. in normal serum, but thermostable in immune serum.

Muir and Martin (13), to clear up the question of specificity of opsonins, and to some extent their nature, compared the opsonic power of two specimens of anti-staphylococcus serum to several different organisms. They found that the thermoslabile opsonin was removed largely by any one of them, whereas nothing except the specific germ, staphylococcus, would remove the thermostable substance from staphylococcus immune serum. They decided that the thermostable immune substance has the specific characters of an anti-substance, and probably has the constitution of an opsonin.

Houston and Rankin (11) studied the opsonic index to meningococcus in the Belfast epidemic and found after the sixth day the opsonic index was always above 4, sometimes earlier and often much

higher. They claim the increase is so marked and constant that it is of much diagnostic value. They speak of leucocytes so packed with cocci in contradistinction to the normal that the "picture is so characteristic that in the majority of cases a diagnosis could be made by simply mixing some washed leucocytes serum from the patient and meningococci and incubating the mixture for a short while without the use of any control". Their reports would indicate that the opsonic index would probably be of special diagnostic value in this disease because the rise is sufficient to be beyond any probable technical variation. It would be of value in diagnosis of sporadic cases as well as "to clear up the etiology of basic meningitis of infants". They found the opsonic index above 5 before any agglutination was demonstrable.

If their observations are correct the modified technic proposed by myself and published in the transaction of the Mississippi State Medical Society, 1907, would be especially applicable, and could be carried out by one ordinarily familiar with laboratory work and not necessarily conversant with the opsonic index technic. In this technic the whole blood is mixed directly with the bacillary emulsion. They also examined several proposed curative sera all of which contained no opsonin or agglutinin.

VACCINE THERAPY.

When we come to inquire into the subject of vaccine therapy, questions that come up are: is it beneficial; is it dangerous to the patient; in what diseases and conditions is it applicable; is the opsonic index control necessary, and has sufficient knowledge yet accumulated for it to be applicable generally. We may be able to answer some of these by running over briefly some of the recently published reports.

By vaccine therapy we mean treatment by means of killed cultures of the specific etiologic bacterium. It is proposed to raise the patient's opsonic and other resisting powers by exciting the reaction which is produced by bacterial substances in the system as physiologically occurs in the course of bacterial diseases that recover.

E. L. Opie, at the last meeting of the Association of American Physicians, May 7-8-9, 1907, while admitting the necessity of

opsonins for phagocytosis, said virulent organisms require the effect of an immune serum. He believes diminution of the opsonic power antedates an infection, which is in keeping with the opinion of Wright and associates (37) that bacteria cultivate themselves in locations of low bacteriotropic pressure. They assume further that lowered bacterial resistance results from retarded replacement of protective substances which are removed from the body fluids where these come in contact with bacteria.

At the above congress E. R. Baldwin, of Saranac Lake, read a most pessimistic paper on the subject. He said it was impossible to distinguish between opsonins and agglutinins. He could not prove specificity of opsonins. The opsonic index was no guide to administration of tuberculin in pulmonary tuberculosis. He admitted, however, an opsonic effect of the serum.

At the same meeting Hektoen gave his observations of the opsonic curves in many infectious diseases, in most of which the opsonic index was low during the earlier stages of the disease, but rose as convalescence was established showing the influence of opsonins on or at least the association with, recovery from bacterial disease. He was of the opinion that opsonins are specific and that the opsonic index has a diagnostic and prognostic significance.

Dr. E. R. Schorer, in the same meeting, gave a summary of the study of opsonins at the Rockefeller Institute. In erysipelas the opsonic index bore no constant relation to symptoms or course of the disease.

Following vaccination with 25 million streptococci the opsonic index rose for about a week. Following 50 million, there was slight fall, then oscillation. Vaccination shortened the course of the disease about two days. So does antistreptococcus serum. He says their technic varies from 0.5 to 1.7, and the opsonic index is of no significance in diagnosis or treatment.

Cole and Meakins (16), reporting some of the experiences in the Johns Hopkins Hospital said the opsonic index was of little or no value, because of the wide scope or error in the technic. They report 15 cases of gonorrheal arthritis treated with gonococcus vaccine, several of which seem to have been benefited. They controlled the treatment by the opsonic index, but later found their technic too inaccurate to be of service and proceeded to vaccinate every

7 to 10 days without this control. Their dose ranged from 300 to 1200 million gonococci. Note the contrast in the dose they used with that suggested by Wright 5 to 20 million and used by Olmacher (30), who reported fine results, and later by McArthur and Hollister and others (38), who also thought they saw good results. If 5 to 20 millions is the proper dose and demands to be controlled by the opsonic index to prevent too great a negative phase we would expect a dose 60 times as large to do great harm.

Cole and Meakins did not see any evidence of any harm done, and think the danger of a cumulated negative phase is not a real one. This shows the flexibility of clinical results. They appropriately remarked that those who expect brilliant results or immediate cures to follow one or two doses of vaccine, will be disappointed. It is interesting that they found the first opsonic index in these cases in practically all below 0.7, and in several 0.5. Capt. Douglas told me recently that it had been their observation, too, that practically all joint gonorrheal cases had very low opsonic indices, and that he considered 20 million a maximum dose of gonococcus vaccine.

Taylor and Knorr (34) report in detail the opsonic index and progress under vaccine treatment of four very acute tuberculosis bone cases, cervical Potts, tubercular hip, acute coxalgia and dorsal Potts, and five cases of tuberculous bone disease with sinuses and secondary infection, four with staphylococcus and one with streptococcus. Knorr having already published some excellent work on the opsonic index technic, and shown himself competent, his curves in this series are of special value. The dose of tuberculin was 1/5000 mgm., increased to 1/100 mg. There was distinct gain in increasing the index with moderate doses of tuberculin in the thousandths, and fall if rapidly increased in the hundredths. This would tend to confirm the dosage practiced by Wright, usually between 1/2000 and 1/800. The dose of staphylococcus ran one thousand millions to one thousand three hundred millions, and indices were favorably raised well above normal. With large doses of either, the negative phase generally follows. They conclude: Vaccines are helpful. Positive phase is not permanent unless vaccine is continued at suitable intervals. The opsonic index is the best guide to the size of dose and proper time to give it. The temperature is not affected by a proper therapeutic dose.

Turton (35) reports 17 consecutive cases of pulmonary tuberculosis, in all stages treated with tuberculin, controlled by the opsonic index, and not having climatic or sanitarium treatment. The results are excellent in 7, fair in 3. The report looks clean. There was noted improvement in general health; cough, bacilli, sputum and pyrexia were reduced. He found the temperature not a trustworthy guide to treatment, as indicated by the opsonic index. His dose was 1/2000 to 1/400 mg.

Von Eberts and Hill (36) treated with vaccines controlled by the opsonic index the following cases: (1) Tubercular ulceration of the bladder. Result, healed. (2) Lupus vulgaris of the lip. Healed. (3) Tubercular arthritis and peri-arthritis of wrist. Healed. (4) Tubercular cervical adenitis. After four months' treatment, improved. (5) Furunculosis. Cured. (6) Carbuncle. Cured. (7) Carbuncle. Cured. (8) Suppurative periostitis. Cured. (9) Multiple abscess of axilla. Cured. (10) Acne indurata. Cured. (11) Gonorrheal polyarthritis. Cured. (12) Epidemic cerebro-spinal meningitis. Recovery. (13) Epidemic cerebro-spinal meningitis. Recovery. (14) Epidemic cerebro-spinal meningitis. Death. They think the opsonic index a most valuable guide to treatment, but tubercle vaccine may be given without it in doses of 1/1500 to 1/800 mgm..

O'Brien (29), at the Massillon State Hospital, found the opsonic index to bacillus paralyticans in cases of paralysis of the insane very fluctuating. Using a vaccine made from this organism he observed quite characteristic negative and positive phases, as described by Wright. More interesting is his belief that his patients were much improved as to paralysis, as well as in general health and weight. No such improvement was noted in the control cases. High opsonic immunity was recorded for some of them.

Painter (33), in the November 7, 1907, number of the *Boston Medical and Surgical Journal*, gives some of his experience with opsonins and bacterial vaccines in treatment of tubercular and non-tubercular arthritis. He reviews the results reported by various men, and very justly criticizes them and considers many of them worthless and misleading. He then reports in detail 11 of his tuberculous bone and joint cases, 7 infectious polyarthritis and two intermittent hydrops. He saw no satisfactory evidence of positive

benefit due to the vaccine in but two of his eleven cases treated with tuberculin, coupled with administration of autogenous vaccine of any secondary infection present. He says it is an open question if one case has not been made worse by the treatment. Two cases have died and another is dying. In the 7 polyarthritis cases treated with vaccine of Schuler's bacilli (the supposed causative organism) and streptococcus, as indicated by the opsonic index, no improvement occurred that could claim to be the result of vaccine. The two cases of intermittent hydrops treated with streptococcus vaccine and one with an autogenous staphylococcus vaccine, were uninfluenced. He says the cases are discouraging on the whole, but admits that there are many obstacles in the way of drawing conclusions from the results of the first year's clinical experience.

Jeans and Sellards (16), reporting some of the observations in the Johns Hopkins Hospital, think that though their control by the opsonic index is untrustworthy, the results obtained by administering tuberculin (T. R.) in infrequent and small doses, as advised by Wright, has given encouraging results. They gave 1/1000 mg. to 1/400 mg. about every 8 to 10 days.

CASES REPORTED.

1. Tuberculous glands of neck: pulmonary involvement. After 5 months lung clear, glands $\frac{1}{2}$ former size. Patient had hygienic treatment. . .
2. Tuberculous glands of neck; returned since operation for same. Treatment $2\frac{1}{2}$ months, no hygienic treatment, no change.
3. Tuberculous arthritis right hip and abscess. Two previous abscesses drained. Two months' treatment. Abscess, which was healing when treatment began, now healed. Flexion increased 15° to 110° . Abduction 5° to 45° . Rotation 10° to normal.
4. Tuberculosis head of humerus. Treatment, $5\frac{1}{2}$ months. No fixation; much improvement.
5. Tuberculosis of hip. Treatment, 3 months. No advance of disease.
6. Tuberculosis arthritis of ankle. Treatment $1\frac{1}{2}$ months. Swelling and tenderness much improved.
7. Tuberculosis arthritis of wrist, acute. Three weeks' duration. Treatment, $4\frac{1}{2}$ months. Pain improved at once and symptoms nearly disappeared. No fixation.

8. Lupus of facee. Five months' treatment. Lesions cleaner, healthier, and scab formation and suppuration much diminished.

9. Tuberculous cystitis. Two months' treatment. No local or general improvement. Local condition worse. They say without comment he later died of tubercular meningitis. This reminds me of a case related to me by Dr. Inman, of the Brompton Hospital, London. A child being treated with tuberculin developed tuberculous meningitis, which seemed to be produced by the treatment. Wright has called attention to this danger of dissemination by producing too great a negative phase, believing opsonic observations must be made to prevent this, and it is highly probable that we will find that improper doses, or those given at inopportune times, may be fraught with greatest danger. It is high time to sound a note of warning against the promiscuous administration of bacterial vaccines that is about to be inaugurated because of the exploitation of them by the manufacturing chemists. I believe I have had some bad results from vaccines in my very limited experience. They could not apply opsonic index in diagnosis. To show the negative side they relate an instance of a patient with a tuberculo-opsonic index of 2.4 by their best technic. Autopsy later showed no tuberculosis, except an old calcified nodule in the lung.

In a recent visit to Prof. Wright's clinic and laboratory I received the impression that he is as much convinced as ever of the correctness of his original opsonic theory and of the value of the opsonic index in both diagnosis and treatment. He places more confidence in high or fluctuating indices for diagnosis and especially the fluctuating indices following massage or passive hyperemia of the infected focus. There is a tendency to give smaller doses of vaccines. Tuberculin is generally given $1/2000$ to $1/800$ mg. about every ten days. He does not make frequent indices in many of the cases because it is impractical, and not because it is not desirable.

My impression was that the opsonic index assists him in diagnosis and treatment often, and that beneficial results are obtained from bacterial vaccines. Tuberculous cases predominate. Next probably come staphylococcus cases.

SUMMARY.

We may from the foregoing make the following deductions:

1. The existence of a substance in the blood serum without which phagocytosis does not occur, is established.

2. The very appropriate name "opsonin", by priority and usage, is established.

3. There is a common opsonin and immune opsonins.

4. Opsonins cannot be accurately measured by present technical procedures.

5. The limits of error are so wide apart as to render the information conveyed of little or no clinical value, except possibly in the hands of those especially adapted to technical work and having much training in the technic and the clinical interpretation of opsonic indices.

6. It has not been proven that bacterial vaccines have not an application, if better understood, in any bacterial infection. The indications are that they have.

7. There is not enough reliable data on the subject to pass it down from the research laboratory man to the general practitioner.

8. Many of the reports are based on erroneous technic and observations, and are worthless and misleading.

9. It is not at all certain that bacterial vaccines may not do great harm, in special instances at least, and the use of them should be proceeded with with great caution until the subject is better understood. Hundreds of lives were sacrificed when tuberculin, a bacterial vaccine, first came out. Proper doses and intervals between them have lessened or removed this danger in this instance, but the other vaccines are not so well understood.

10. Tuberculin in doses of 1/2000 to 1/800 mg. may be given about every ten days in chronic tuberculosis without much, if any, danger.

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DR. H. B. GESSNER read a paper entitled

Second Popliteal Aneurism Operated on by Matas Method.

Felix Lewis, colored male, nativity La., painter, 29 years old, was admitted to Ward 1, Charity Hospital, June 24, discharged August 25, 1907.

Diagnosis: Popliteal aneurism, right side, fusiform variety.

Family History: Negative.

Personal History: Patient has been employed as a painter for 19 years. Smokes considerably; drinks, but not to excess. Says he had rheumatism ten years ago. Had ordinary diseases of childhood. Says he had a chancre about seven years ago, and chancroid about five years ago. Took no medicine internally for the chancre. Physical examination of organs, negative. No history of colic.

Present illness: About two months before admission he noticed slight pain in the knee, which he attributed to rheumatism. He noticed his knee gradually swelling. About four weeks after this,

patient says his knee began to pain him so much that he consulted a physician. At this time patient says he noticed that his knee was slightly stiff and he could not straighten his leg.

On admission to ward patient's leg was slightly flexed on thigh. He complained of severe pain in right knee, increased on motion and pressure. Leg was warm to touch. On palpation a rigid mass was felt just behind knee, with pulsation expansile in all directions. Pressure above the mass seemed to diminish the size, whereas pressure below increased it. On auscultation an aneurismal bruit was heard.

$17\frac{3}{8}$ " right knee }
 $14\frac{1}{4}$ " left knee } circumference. No pulsation in either terminal vessel, dorsal pedis or posterior tibial.

On June 26, after due preparation, the patient was taken to the amphitheater, where, under ether anesthesia (after first applying a constrictor) a longitudinal incision was made over the median portion of the bulging mass. Getting down to the aneurismal sac a nerve trunk, believed to be the external popliteal, was nicked. The sac was incised in the direction of the external wound and freed of a large amount of clot. The upper opening was readily found and closed completely with two rows of fine silk sutures on the Lembert plan. The lower opening was found only by removing the constrictor and allowing collaterals to pour blood through it into the sac. This opening was then closed in the same manner as the upper and the sutures tested by complete removal of the constrictor. The sac walls were brought together with sutures at each end, a small pack being left in the cavity. It is interesting to note that the sac developed to the outer side of the openings, as well as above and below them.

The after treatment included slight elevation, external heat and nitroglycerin internally. Later potassium iodid was given.

Shortly after the operation a large bulla appeared on the convexity of the heel, and suspicious dark spots on the end of the great toe and on the external malleolus. The two latter cleared up entirely. The heel lesion developed into an ulcer, which is still present and, combined with motor, sensory and trophic lesions in the leg, shows that the nerve injury inflicted at the time of the operation was more severe than it was thought to be at the time,

and that a secondary suture will be necessary. Examination of the site of the aneurism shows it to be completely cured.

Comment: As a painter he suffered from lead poisoning, which predisposed to arterial degeneration. The operation, which lasted 70 minutes, would have been shorter by 15 to 20 minutes, had I resorted earlier to removal of the constrictor in order to locate the lower orifice. The collapse of an aneurismal sac following the removal of its contents allows its walls to form folds among which it is at times difficult to find the orifices, especially that of the lower segment of the vessel. That, at any rate, has been my experience in two cases of popliteal aneurism. In another case, I should expect to economize time by early removal of the constrictor, after suture of the central orifice, to locate the peripheral one.

This case, like many of those already in record, shows the great value of this operation in disturbing to the minimum degree the collateral circulation. Although the aneurism had been noticed by the patient but two months, and consequently but little time had been allowed for the development of collateral circulation, there was no interference with the circulation of the limb, no bad effect attributable to the operative interference with the aneurism. The nerve lesion was an unfortunate accident, chargeable to the operator and not to the operation, which will be remedied in the near future, we hope, by a neurorrhaphy.

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The Ownership of the Prescription.

The President of the Louisiana State Board of Health has accepted a large responsibility in making a contestable law or rule declaring the prescription the property of the physician. Every now and then the question is brought up in one or another state and here and there opinions of judicial tribunals have decided variously in the matter. It is true that cases have been brought into court on various accounts and the decisions have been particularized. A few years ago a Massachusetts judge decided the prescription the property of the patient.

Under any circumstances the prescription has a mission of its own, and if it were understood there might not be any need for a law. The business side of the prescription is essentially the elemental idea, and these are the facts: Mr. A. calls on the doctor, complains of an ailment; receives a piece of paper with symbolic literature upon it; pays for it or has it charged and, so far as patient and physician are concerned, the transaction is temporarily closed though it is incomplete. Mr. A. can keep the piece of paper as a souvenir; treasure it for the autograph of the medico; frame it for the delectation of his household; travel with it around the world; make presentation of it to some friend. But according as he disposes of it, it is consistently the property of the patient until he parts with it, and once it is given or sold to the patient, the physician can have no moral right and, obviously, no legal right to demand the return of either the piece of paper or the information he has sold outright.

On the other hand, it can be claimed that, once Mr. A. has handed the prescription to a druggist, to be filled, he has no further right to the paper, which is merely an order to the druggist to

prepare certain ingredients in a certain way, and only once, unless otherwise specified. The copy frequently given to the patient would be solely for his information or for the guidance of any other physician he might consult in the future.

While the patient ordinarily surrenders the prescription in the deal, the druggist is not entitled to consider it his property, if common sense is lawful. He files it for his own protection, for reference by the physician, or repetition by the latter's order. He is merely the custodian of the prescription which has now fulfilled its active mission and is then only a matter of evidence.

The objects aimed at by the Board of Health are quite commendable, and perhaps may prove attainable under the ruling of the Board and under its police power—until some patient takes exception and demands the law in the matter; then it must rest with our own state to pass upon the law as it applies here. The patient of extraordinary intelligence may and can understand the necessity for restricting the prescription to the person for whom it is written; but the average layman not only abuses the information he buys from the physician by often trying to treat himself, but he as often tries to treat the rest of his family with the same prescription, even upon his own diagnosis of the sickness. Again, it is a common practise to circulate the prescription in the neighborhood and among friends and acquaintances as a "good thing."

Of course the druggists can co-operate with the medical profession if they will, by refusing to refill a prescription without a doctor's order, but the physician and the druggist have not reached such a plane of understanding; more than this, the druggists owe a large portion of their revenue to the repeated prescription and most of them do not question the real ownership, so long as a number or a copy is presented over the counter. Besides, physicians connive at the practise because it is easier to direct that a prescription be refilled than to write it again or an order for the same.

The dispensing of medicines from the physician's office is growing more and more in the cities on these very accounts, and the wholesale pharmacists are beginning to appreciate this side of their supply to the practise of medicine.

Laws may be made and Board of Health rules might prevail which would regulate the prescribing of poisons by physicians and,

in this way, the chief end accomplished which is aimed at by the Board of Health of this state, but we are doubtful if a conviction of either druggist or patient would stand the test of the courts if the ownership of the prescription were the ground on which a charge should rest.

Concerning Prescriptions.

In line with our editorial, we are very much pleased to have the privilege of presenting to our readers the following, written by one of the most eminent members of the legal profession of New Orleans:

"There has been in New Orleans of late much discussion of physicians' prescriptions, and the repeated filling of them by pharmacists. The opinions expressed have been generally quite *ex parte*, and without the benefit of full discussion and impartial decision. A brief reference to judicial decisions may be of some use. The opinion of a court has this merit, at least, that as a rule counsel are heard on both sides of a question, and then the judge, presumably impartial and honest, renders his decision as best he can.

"In the case of Bruendi, 102 Wis., p. 48, a very learned court held that the word "prescribe," as applied to the act of a physician, means to "advise, appoint or designate as a remedy for disease." The same view is taken by the Supreme Court of Alabama, in the case of Brinson vs. the State, 89 Ala., p. 110, where the learned court says that to "prescribe" is to "direct as a remedy."

"A prescription, then, is a matter of advice. It may be simply oral, as where a doctor advises a patient to go and drink a bottle of citrate of magnesia. Or the advice may be committed to writing, so that an apothecary can mix the ingredients as recommended. If we keep this idea in mind, there will be little trouble in reaching a correct conclusion.

"It has been thought, however, by some, that a prescription is the property of the physician who gives it; but this theory seems erroneous. If there is practically any property in advice, whether oral or written, it can hardly be said to belong to the person who gives it. He has given it either gratuitously or for a consideration, and it no longer abides in him. If a lawyer gives a banker a written

opinion on the liability of an indorser of a promissory note, it would seem that the document would belong to the banker, and that he might use it as often as he chose in the conduct of his affairs. So, in case of advice or direction given by a physician to a patient in writing, as to a remedy, it would seem the document would belong to the patient to whom it was given. The apothecary would not own it in any proprietary sense, though he might, and usually does, keep it on file as a record of what has been done, and in many cases as a protection, both to the physician and the apothecary.

"I am told that it is the custom, when the physician does not think it proper for the patient to repeat a prescription and keep on taking it, to mark the document with directions that it is not to be repeated; and I assume that the apothecary would respect this limitation, and thus prevent injury by cumulative poison or otherwise. But in the absence of such restriction or prohibition, it would seem that, as a matter of right, it belongs to the patient to decide how often a prescription should be filled, and how long he should take the remedy.

"In the case of the Chicago Board of Trade vs. the Christy Company, 198 U. S. 236, the Supreme Court of the United States held that quotations collected by the Board of Trade, and communicated to certain telegraph companies under an agreement that they should be distributed only to certain persons approved by the Board, were entitled to protection by injunction, from use by certain others. If we apply the principle of this case to a prescription, such prescription might perhaps be delivered to the patient with a similar contract and consideration that it should be held confidently for the use of the patient only, and even that it should not be repeated."

(Signed) W. W. HOWE.

The Morning World.

New Orleans and Louisiana possess a new daily newspaper. At first blush there might seem to be nothing of medical interest in the announcement. Yet there is.

The dailies which were already published here accept and print the most blatant quack doctor advertisements. They disguise as

news items and telegrams skilfully arranged ads of nostrums. They publish notices of abortifacients and abortionists.

The new paper is pledged not to give space to any of the above-mentioned frauds or other objectionable and immoral medical advertisements. It is endorsed by the Orleans Parish Medical Society. It promises to be just and fair to the medical profession.

The contrast is great. If the *World* is a good newspaper, it will not take long for members of the profession to decide where to bestow their patronage.

Abstracts, Extracts and Miscellany.

Department of Obstetrics and Gynecology.

In Charge of DR. P. MICHINARD and DR. C. J. MILLER, New Orleans.

LIGATION OF A URETER DURING ABDOMINAL HYSTERECTOMY. CONDITION OF THE KIDNEY AT AUTOPSY FIVE AND A HALF MONTHS LATER. (Violet, *Lyon Medical*, *Zentralbl. f. Gyn.*, No. 9.)

As no method of disposing of the cut ureter was feasible, the proximal end was ligated and dropped back into the abdomen. The patient gave no symptoms referable to the ureter. On the day of the operation she passed 500 grams of urine, gradually more per day until the sixth day after operation, when she passed 1,100 grams. Only during the first two days after operation the urine drawn by catheter showed traces of albumin. The patient never complained of pain in the kidney of the affected side. Autopsy was done five and one-half months after operation. The kidney on the affected side did not show any dilatation, nor was its volume lessened, so it may be safely assumed that renal atrophy following ligation of the ureter takes place but very slowly. Signs of a slight perinephritis were present, the fatty capsule was sclerotic, adherent, and the true fibrous capsule was difficult to strip off. Upon section the pelvis and calices of the kidney were pale and contained no urine; the pyramids were somewhat flattened and the cortex, although somewhat atrophic, is from 6 to 7 m.m. thick if measured from the capsule to base of pyramids.

The condition of the other kidney was not determined. This result of the ligation of a ureter and the total absence of symptoms referable to the ligation is of practical interest.—*Annals, Gyn. and Ped.*, May, 1907.

PROGNOSIS OF BREECH PRESENTATIONS.—Ganssel Zuglemann (*L. Obstet.*) reminds us that in former times the breech presentation was regarded as somewhat less favorable to both mother and infant than the vertex. He has made a study of the records of the Maternity Hospital of Montpelier, with reference to the statistics to be gained in breech presentations. He finds that they were somewhat less frequent than in city clinics. Between 1896 and 1906 he finds 53 breech presentations, 32 complete and 21 incomplete. He concludes from tabulation of the records of these cases that breech presentation is almost as favorable for the mother as the vertex. The course of labor is as rapid and as regular, ruptures are no more frequent than usual, and the puerperal period is physiological. For the child the prognosis is a little graver than in the vertex presentations; complete and incomplete presentations do not differ. The disengagement of the feet to assist delivery does not seem to be of any benefit.—*Amer. Jour. Obst.*

TREATMENT OF MASTITIS WITH BIER'S SUCTION.—P. Zacharias (*Munich Med. Woch.*) has made use of the suction method of Bier in cases of mastitis treated at the Erlanger Hospital. The production of passive hyperemia through suction apparatus has a wide field in modern therapeutics. The suction hyperemia has the effect of inhibiting bacterial action in the tissues. In the last seven (7) years, at the Erlanger clinic, there have been treated 2,214 labor cases, among which there have been 52 cases of mastitis, that is, 2.35 per cent. Among these cases 63 breasts were treated. Thirty were treated antiphlogistically; ten per cent. had to be incised. Thirty-three were treated by suction; only two were incised that is, 6 per cent. The author believes that at the beginning of a case of mastitis this treatment is a sovereign remedy. Only failure in the technic, or beginning the treatment too late, will give unsatisfactory results.

In cases which come to the clinic after abscess formation has taken place no benefit will be received. This method enables the

mother to continue nursing the child, while under the old system it was necessary to stop nursing and on recovery the milk was gone from the breast. Under this treatment lactation is rather a benefit to the mother. If nursing gives pain, the milk can be removed by suction and lactation begun at the end of the treatment. The best method of applying the treatment is to begin as soon as there is any rise of temperature, giving three suction daily of half an hour each. The child may nurse before the treatment, as otherwise the greater part of the milk is lost. After the temperature has fallen and inflammation disappears suction is stopped, treatment being needed for two or three days at most. When by the third day the temperature has not fallen to normal, we may expect abscess formation.

Recurrence took place once, but yielded to the same treatment. The bell glasses should be large enough to entirely cover the gland and should not give pain. In thin patients a little air may get under the bell, and this will give pain, so that some pressure may be needed to keep the bell in contact with the thorax. The bell must be filled gradually with air at the end of the treatment.—*Amer. Jour. Obstet.*

Department of Therapeutics and Pharmacology.

In Charge of **DR. J. A. STORCK** and **DR. J. T. HALSEY**, New Orleans.

THE IRON AND ARSENIC TREATMENT OF THE PRETUBERCULOUS STAGE is advocated by Shurley, because of the almost invariable coincidence of a chronic form of anemia. He gives the drugs hypodermically, and reports most excellent results. The important matters, nevertheless, are rest, food and cold air. Tyndale is quoted as saying "that localized tuberculosis does not endanger life of itself, so long as the general nutrition begets a reasonable resisting power of the pulmonary tissues."

Patients must be informed that they have overdrawn the bank account and that they must reduce expenses and increase the deposits. "Rest up, live in the open air, and eat, eat, for God's sake eat!" There is no reasonable doubt that followers of the

Yale theory of economy are running the risk of developing this pretuberculosis condition of poverty.—*American Medicine*. J. A. S.

IBERIS AMARA, BITTER CANDYTUFT.—This is one of the remedies used from antiquity and recently reintroduced. It is used in enlarged heart to control vascular excitement and allay reflex irritability. In dyspnea and bronchial spasm, vertigo, and dropsy of cardiac origin, it is highly recommended by many authorities.—*Materia Medica and Therapeutics*, by T. S. Blair, M. D. J. A. S.

Miscellaneous.

TREATMENT OF ACUTE ARTHRITIS WITH INTRAVENOUS INJECTIONS OF COLLARGOL.—[G. Riebold.] Innumerable cases of acute and subacute arthritis are very rebellious to treatment. For example, there does not exist any specific treatment for gonorrheal arthritis. Above all, acute rheumatism oftentimes resists the salicylates. Even Bier's treatment may fail, and symptomatic treatment remains as our last recourse. In these difficult cases, Riebold resorted to intravenous injections of collargol.

In fifteen cases of varied articular affection, he obtained a complete cure in ten cases, and considerable improvement in four. Among these patients there were seven cases of gonorrheal rheumatism, two of acute rheumatic polyarthritis, four of subacute articular rheumatism. In all the cases, the pain diminished in two, three, or at most, twelve hours after the injection.

The general condition improved, and the sufferers succeeded in getting some sleep.

The influence of the collargol on the articular swelling was notable. Complete mobility was restored after the disappearance of the pain and swelling; and, in cases where grave lesions existed, the treatment gave magnificent results, stopping the pain that rendered any motion impossible. The temperature fell considerably during the day or two following the injection, and it continued normal after two or three injections.

Riebold employed a two per cent. solution, of which he injected eight cubic centimeters at the first injection, and six or eight c. c. in subsequent ones. The efficiency of the remedy depends on the

dose. The frequency of the dose varies according to the case. It is advisable to repeat the dose as soon as the pain and swelling return. Riebold generally uses three or four injections, sometimes five or six, in order to secure a lasting result. Meanwhile, local treatment need not be overlooked.

The injection should be painless; pain indicates that the collargol has penetrated to the perivascular tissue. The technique is very simple, and can be repeated two or three times at the same spot. The injection may prove to be a little troublesome where there is a very thick panniculus adiposus. An intravenous injection, when well done, does not give rise to unpleasant accidents. It should never be done rapidly, otherwise it provokes cough and dyspnea; and the injections should never be given in very large doses, which latter would cause elevation of temperature with rigors and sweats. Intravenous injections of collargol are almost a specific against gonorrheal rheumatism.—*Novidades Medicas e Pharmaceuticas.*
(Translated by A. McS.)

DIETETICS OF ENTERITIS AND ARTERIOSCLEROSIS.—All of the organs concerned in digestion display an undeniable solidarity. If the stomach prepares the aliments, the intestines and the accessory organs digest them completely, render them assimilable, and cast out the refuse. The abnormal functioning of the intestine reacts disastrously upon the entire organism. Enteritis, or inflammation of the intestine, often affects the colon and small intestine, and is then called entero-colitis.

Entero-colitis does not always present itself under the same aspect. It is the resultant of several factors which are: 1st, lesion of some organ in direct relation with the intestine (liver, kidneys, vermiform appendix); 2d, the neuro-arthritic tendency; 3d, the bacterial and parasitic infections which predispose to enteritis and keep up its manifestations.

These infections often take their origin in a faulty diet, one too rich in nitrogenous substances. The important works on intestinal infection that have recently appeared, inspired by Calmette (of Lille), call attention anew to this capital question.

It seems to be demonstrated that tuberculosis can be imparted to infants by feeding them on milk containing Koch's bacilli, or by the toxins freed from bacilli. Vansteenberghe and Gryscz have shown

that pneumonia and several other phlegmasic infections of the lungs could have an intestinal origin. Introduced into the digestive tube the pneumococcus succeeds in traversing the epithelial barrier of the intestine, which is also done by tubercle-bacilli and powdered coloring matter.

If the microbes play an important part in the etiology of gastrointestinal infections, the parasites injure the mucous membrane, and, by "cracking the filter," facilitate the penetration of intestinal bacteria into the organism. The labors of Metschnikoff and of Guiard leave no doubt as to the harmful role played by these parasites in the evolution of appendicitis and typhoid fever.

I. *New Theories of Old Age and Intestinal Infection.*

The digestive tube is the big factory of byproducts which, passing into the organism, poison our healthy cells just as a toxic chemical agent would. This processus gives rise to arthritism with all of its accompanying ailments. Prof. Metschnikoff has shown us that senility was only a slowly evolving disease, and the effects of which were at all points comparable to an auto-intoxication.

From the very moment of birth, the human intestines become sown with germs, and the meconium serves as a culture-medium for microbes. If the child takes cow's milk, its microbial flora becomes richer than when it is fed on breast-milk. Here, then, already offers the means of changing the intestinal flora by modifying alimentation. The adult who takes cooked foods, diminishes his flora.

The preservation of foods with acid liquids is as old as the world. For centuries, meats have been pickled, and some tribes preserve meat with sour whey.

The Microbes of the Intestines.—Of all our organs, the intestines are richest in microbes. These micro-organisms find in the residue of our food a culture-field favorable to their development.

Here are the enemies that we must combat. Our intestines also harbor, in certain cases, parasites that puncture the mucous membrane, and thus open the door to the intestinal bacteria. If these latter are the source of our senile atrophy, then the more the flora is reduced, the less apparent will be the manifestations of old age.

We know that birds have a much greater longevity than the ma-

jority of mammals. Now, birds do not possess a large intestine; "that reservoir of alimentary refuse," which, in mammals, feeds an enormous quantity of microbes of all kinds. Even at an advanced age, birds preserve their normal aspect and their agility. It is quite otherwise among mammals. A dog, fifteen years old, shows his age by his slow movements, his tired attitude, and his lustreless hair. A crow or a perruche of twenty years have active movements, and their exterior does not betray their age.

If we put cause and effect together, we find that there is a close relationship between the length of the large intestine, the number of bacteria that develop there and more or less premature senility.

II. *How to Secure Antisepsis of the Digestive Tract.*

An adult can, by taking daily large doses of lactic ferment, lessen the intestinal poisons in a notable degree. A capital point is this: several weeks after the cessation of the lactic treatment, the bacilli lactis can still be found in the intestine. Under a special diet, rich in sugars and starches we can prolong indefinitely the presence of the lactic bacillus. If the milks inoculated with lactic yeasts such as yoghourt, kefir, etc., secure intestinal antisepsis, the employment of these milks has always been limited by the drawbacks inherent in these preparations. Their taste is more or less agreeable, but it is impossible to preserve them.

Then, we can replace these milks by pure cultures of this ferment.

The millions of microbes that struggle for existence in our dejecta, are more or less harmful. They can be the cause of enteritis, typhoid fever, etc. The pathogenic bacteria pour into the circulation, by means of the lacteals, poisons that are more or less violent. The new theories of intestinal infections give a preponderant place to these bacterial toxins in the genesis of biliary and peritoneal infections. The experiments of Bierstock have shown that the bacilli of putrefaction of the intestinal contents can not develop in the presence of a vigorous lactic bacillus. We have there the whole secret of intestinal disinfection by the aid of the lactic ferments.—*Gazette Médicale de Paris.*

A. McS.

Louisiana State Medical Society Notes.

In Charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

MINUTES OF 1907 MEETING.

(Continued from November issue.)

THIRD DAY.

THURSDAY, MAY 16, 1907.

Dr. McVea in the Chair.

Minutes of previous day's sessions read and adopted.

Dr. J. A. Danna read a paper entitled "Some Recent Experiences in the Surgery of the Kidney," which was discussed by Drs. E. D. Martin and Dr. Danna, in closing.

Dr. H. B. Gessner read the Report of the Nominating Committee, as follows:

NEW ORLEANS, MAY 16, 1907.

To the Officers and Members of the Louisiana State Medical Society:

GENTLEMEN: We, the undersigned Nominating Committee, make the following recommendations:

1. For election to office:

President, Dr. Oscar Dowling, Shreveport.

First Vice-President, Dr. L. Lazaro, Washington.

Second Vice-President, Dr. M. J. Magruder, New Orleans.

Third Vice-President, Dr. R. B. Paine, Mandeville.

Councillor for Fourth Congressional District, Dr. J. L. Scales, Alden Bridge.

Councillor for Fifth Congressional District, Dr. E. Dunbar Newell, St. Joseph.

Councillor for Sixth Congressional District, Dr. C. M. Sitman, Greensburg.

Councillor for Seventh Congressional District, Dr. R. O. Simmons, Alexandria.

Alternate to Dr. Chassaignac as Delegate to A. M. A. meeting, for one year, Dr. A. J. Perkins, Lake Charles.

Delegate to A. M. A. for two years, Dr. Charles McVea, Baton Rouge.

Alternate to Dr. McVea as Delegate to A. M. A. for two years, Dr. W. W. Butterworth, New Orleans.

2. Place of Meeting, Alexandria.

3. Time of meeting, April 21, 22, 23, 1908.

4. In regard to vacancies on the State Board of Medical Examiners, we find that two members of the Board now reside in the Fourth Supreme Court District, viz.: Dr. Barrow and Dr. Sim-

mons. As Dr. Barrow's term has expired and said district is still represented on the Board, we make nominations for the Third Supreme Court District, now and for some time unjustly deprived of its proper representation by mistake. We therefore recommend that the names of Drs. J. G. Martin, of Lake Charles, and C. J. Gremillion, of Alexandria, be sent to the Governor for consideration, one of them to be appointed by him to represent the Third District on the Board of Examiners.

We further recommend the adoption of the following resolution:

"Whereas, Dr. A. Feltus Barrow has served the medical profession of the State on the Board of Medical Examiners for a number of years, devoting the best of his intellect and energy to the service; be it

"Resolved, That we recognize his good work for our profession and hereby express our sincere appreciation of it."

5. We recommend the modest honorarium of \$500.00 for the zealous and efficient Secretary and the further honorarium of \$50.00 for his faithful and courteous assistant.

(Original signed.

NOMINATING COMMITTEE

J. J. ARCHINARD, Chairman.

HERMAN B. GESSNER, Secretary.

Dr. Guthrie moved that that the nominations and recommendation embodied in the report of the Nominating Committee be taken up and ballotted upon seriatim, which motion was adopted.

Thereupon the nominations were taken up one at a time in the order named, and each nominee was duly elected by ballot and each of the recommendations was likewise adopted, with the exception that the date of the next meeting was fixed for April 28, 29, 30, 1908.

Moved and carried that the report be adopted as a whole.

Dr. S. M. D. Clark read a paper entitled "The Present Status of the Question of Uterine Carcinoma, With Especial Reference to its Early Diagnosis and Radical Treatment," which was discussed by Drs. Chavigny, F. J. Mayer, C. J. Miller, Carruth, Michinard, Newton, Dempsey and Dr. Clark, in closing.

Dr. Michinard introduced a resolution providing for the appointment of a committee on cancer, and moved its adoption. It was duly adopted.

The question of devising means by which the scientific sessions of the Society could be proceeded with in a quicker and more satisfactory manner, was then taken up.

Discussed by Drs. Chassaignac, Simon, Bayon, Gordon King, McGehee, Lazaro and Thibaut.

Moved by Dr. P. E. Archinard that the President appoint a committee of three or five to suggest a plan for the work of the next meeting. Seconded and carried.

Dr. Scales reported that the Council was reorganized and ready for business.

Dr. Lazaro: The Treasurer, in his report, made a recommendation which he would like to have acted upon. It is not possible to get this report to the Council except by action of the Society. I make a motion that the report be referred to the Council.

Motion seconded and carried.

Dr. O'Donnell read a paper on "The Management of Abortion," which was discussed by Drs. Michinard, Clark, Chavigny and O'Donnell, in closing.

Dr. C. J. Miller read a paper entitled "The Treatment of Extensive Cystocele and Uterine Prolapse," which was discussed by Drs. Clark, Chavigny, O'Donnell and Miller, in closing.

Dr. A. C. King: There were a good many important papers passed over, Dr. Souchon's, particularly. I move that a committee of one be appointed to see Dr. Souchon, and ask him to come back and read his paper and present to us his method.

The motion was duly seconded and carried, and Dr. King was appointed a committee for that purpose.

The Secretary then read a supplementary report from the Council regarding the recommendation of the Treasurer that the annual dues be increased, viz.:

REPORT OF THE COUNCIL.

In reference to the recommendation of the Treasurer that the annual dues of the Society be increased, the Council is of the unanimous opinion that there exists no necessity for increasing the annual dues, believing that the ordinary revenues are sufficient to meet the ordinary expenses of the Society.

New Orleans, May 16, 1907.

(Original signed.) JOHN L. SCALES, Secretary.

THURSDAY AFTERNOON, MAY 16, 1907.

2:30 O'CLOCK.

Dr. Souchon read a paper entitled "On the Preservation of Anatomic Dissections, With Permanent Color of Muscles and Vessels."

Under the head of unfinished business the recommendation of the Council with reference to Western Catahoula Parish Society was taken up and adopted.

The Secretary read a resolution by Dr. Dyer relating to medical expert testimony, and moved its adoption. The resolution was duly adopted.

The Chair: I will say that under unfinished business I omitted a duty I was charged with, the appointment of a committee on next year's program. I have appointed Dr. Halsey, chairman; Drs. Thibaut, Watson, Miller and Trahan.

Dr. Thiberge read a paper entitled "Electricity as a Factor in Diagnosis and Treatment."

Discussed by Drs. Guthrie, E. S. Keitz, Thiberge in closing.

Dr. Granger read a paper entitled "Further Report of the Treatment of Malignant Growths by the Massey Method of Electrical Sterilization," which was discussed by Dr. Willis, and Dr. Granger, in closing.

Dr. Hummel read a paper entitled "The Medico Legal Aspects of Insanity."

Dr. Chassaingnac read his paper entitled "Is Sexual Continence Compatible with Health," which was discussed by Drs. Patton, Hummel, Dupaquier, P. E. Archinard, Nelken, Seay and Chassaingnac, in closing.

Dr. Bayon read a paper entitled "Observations on Anatomical Anomalies."

Dr. P. E. Archinard: I move that the papers not read be referred to the Publication Committee.

Dr. Thibaut: I would like to add to that that the committee be given ten days in which to receive these papers, and that they be considered read by title.

Dr. Archinard accepted and the motion, so amended, was adopted.

Dr. E. D. Martin introduced the following resolution:

Be it resolved: That the Louisiana State Medical Society, believing that the formation of medical societies is proper and furthers the advancement of medical science, do hereby endorse the Southern Medical Association.

Adopted.

The officers elected at the meeting were then installed, after which the Society adjourned, to meet at Alexandria, April 28, 29, 30, 1908

P. L. THIBAUT, D. D.,
Secretary.

MEETING OF THE SHREVEPORT MEDICAL SOCIETY. The annual meeting of the Shreveport Medical Society was held at Shreveport last week, Dr. G. B. Lawrason, President, in the chair, and the following members present: Drs. T. F. Schupert, D. A. Mohler, A. A. Herold, J. C. Willis, J. F. O'Leary, S. L. Williams, J. M. Bodenheimer, I. M. Callaway, J. J. Frater, F. J. Frater, G. B. Lawrason and S. C. Borrow.

As this was the annual meeting for election of officers, the scientific program was dispensed with. Dr. Lawrason announced that the election of officers was in order. The following were elected unanimously: Dr. J. C. Willis, President; Dr. J. M. Bodenheimer Vice-President; Dr. D. A. Mohler, Secretary; Dr. W. L. Egan, Treasurer.

Dr. Herold then submitted the report of the entertainment com-

mittee for the Tri-State Medical Society, showing a surplus, which was turned over to the Treasurer of the Society.

Drs. Furman, J. J. Frater and J. C. Egan were appointed a committee to draft suitable resolutions respecting the death of Dr. J. J. Scott. Drs. J. C. Egan and F. S. Furman submitted a short sketch of Dr. Scott's life. Dr. Bodenheimer then introduced a resolution revising the provisions for membership to the Society. This resolution was carried over for the next meeting.

ASSUMPTION PARISH MEDICAL SOCIETY. The regular meeting of the Assumption Parish Medical Society, held October 3, 1907, was well attended and consisted in the reading of interesting clinical reports and discussions thereof. Dr. V. Painchaud, of Klotzville, was elected to membership.

ST. JOHN-ST. CHARLES BI-PARISH MEDICAL SOCIETY. This Society held its annual meeting on December 3, with the following members present: Drs. J. P. Elmore, L. T. Donaldson, L. C. Tebo, S. Montegut and E. P. Feucht. Several interesting cases were reported and discussed, after which the following officers were elected: President, Dr. E. P. Feucht; Vice-President, Dr. L. T. Donaldson; Secretary-Treasurer, Dr. L. C. Tebo. Dr. S. S. Anderson was elected to membership.

Medical News Items.

THE TWENTIETH ANNUAL MEETING OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION was held in New Orleans December 17-18, and was largely attended by prominent surgeons from all sections of the United States. Judged from the standpoint of the number of papers actually read it was the most successful meeting ever held. Fifty-five papers were read, or announced by title, covering the entire field of gynecological and general surgery, and among the contributors were many of the foremost teachers and surgeons of America.

It has been interesting to watch the gradual evolution of this Association. Originally intended, as its name implies, to foster higher surgical aims and to bring together the Southern contingent of the profession, its work from the beginning was of such a character that it rapidly outgrew sectionalism, and it has become one of the most popular national societies.

The meetings, with the exception of an afternoon session at the Tulane Medical College, were held at the St. Charles Hotel.

The first session was principally devoted to post-operative complications and genito-urinary surgery. In this list of papers was

one of special note, by Dr. Chas. Mayo, of Rochester, Minnesota, on "Transperitoneal Removal of Tumors of the Bladder," and another by Dr. L. S. McMurtry, of Louisville, on "The Time and Choice of Operations in Fibroid Tumors, Complicated by Pregnancy."

The afternoon session of Tuesday was devoted to bone and joint surgery. Papers were read by Drs. Caldwell, of Cincinnati, Mason, of Birmingham, Robins, of Richmond, Brown, of Birmingham, Carr, of Washington, Frieberg, of Cincinnati, and Westmoreland, of Atlanta.

Wednesday morning was given over to clinical work at Charity Hospital. Various members of the house staff and visiting physicians of that institution, exhibited cases, and gave brief demonstrations on clinical topics.

The Wednesday afternoon session was held at the Tulane Medical College. Among the special features of this session were a demonstration of the value of lantern slides in teaching anatomy, and the exhibition of anatomical specimens prepared by a new and original method by Dr. E. Souchon. Other notable papers were the President's address, by Dr. Howard A. Kelly, on "Art Applied to Medicine and Surgery"; "Recent Advances in Surgery of the Heart," by Dr. R. Matas, of New Orleans, and "Transperitoneal Ureterotomy," by Dr. Gerry Holden, of Jacksonville, Fla.

Among other papers contributed at the various sessions may be mentioned a tabulated report of eighteen Cesarean sections by H. D. Fry, of Washington; "The Treatment of Diffuse Suppurative Peritonitis, by Stuart McGuire, of Richmond; and articles by A. H. Ferguson, of Chicago, H. J. Boldt, of New York, H. Cushing, and Hugh Young, of Baltimore.

Local members who contributed papers were Drs. E. Denegre Martin, Rudolph Matas, J. D. Bloom and C. Jeff Miller.

The work of the sessions was interspersed with various entertainments.

On Tuesday, the first day, a luncheon was tendered the members by the Board of Management and Hospital Staff of Touro Infirmary, and in the evening a smoker was given by the members of the Orleans Parish Medical Society at the Elks' Home. The faculty of Tulane Medical College entertained at a luncheon at the Medical College Wednesday, and Thursday the resident members of the Association gave a luncheon at the St. Charles Hotel.

The local profession and members of the Association received with pleasure the announcement that Dr. F. W. Parham, of New Orleans, had been elected President for the ensuing year. Dr. Parham was among the early members of the Association, and has always taken an active part in the proceedings. The other officers elected were:

Dr. Willis F. McDonald, of Atlanta, First Vice-President.

Dr. Henry D. Fry, of Washington, Second Vice-President.

Dr. Stuart McGuire, of Richmond, Treasurer.

Dr. W. D. Haggard, of Nashville, Secretary.

Dr. Howard A. Kelly, of Baltimore, Member of Council.

Dr. Jno. Young Brown, of St. Louis, chairman of Committee of Arrangements.

St. Louis, Mo., was selected as the next meeting place.

THE OWNERSHIP OF THE PRESCRIPTION. "The ownership of the physician's prescription is a question which has never been decided by the higher courts. In one case in Ohio it was decided that the files of prescriptions in a drug store belonged to the druggist, and that the prescriptions were not a part of the general stock of the drug store, and, therefore, could not be held under the mortgage covering the stock in the store. In Missouri, under a statutory provision, prescriptions are required to be preserved by druggists, and therefore are held, to an extent, to become public papers. (State vs. Davis, 108 Mo., 666.) The case of the R. C. Stuart Drug Co. vs. Hirsch, 50 Southwestern Reporter, 583, decided by the Court of Civil Appeals of Texas, March 22, 1899, expresses the opinion that a druggist has a property right in prescriptions. The court says that there was testimony in this case tending to show that there was a qualified right to the use of the prescription in the person depositing it, if asserted; but otherwise, and between the druggist and third persons, the druggist was entitled to it. The general trend of opinion, which seems to be the just one, is that the prescription is an order from the physician to the druggist, but the patient who pays for the prescription has an undoubted right of property in it until he surrenders it to the druggist to be filled. Thereafter the prescription belongs to the druggist to keep on file for his own protection and for the protection of the public and the physician."—*Journ. A. M. A.*

MEETING OF THE TRI-COUNTY MEDICAL SOCIETY. This Society met in Brookhaven, Miss., on December 11, 1907, with fifty members in attendance. The following officers were elected for the coming year: Dr. J. A. Rowan, President; Dr. D. W. Jones, Secretary. A resolution was adopted to introduce a course of instruction through the public schools in regard to tuberculosis and hygiene in general. The Society also placed itself on record as favoring a tuberculosis sanitarium in connection with the State Hospital, which the State Medical Association hopes to secure from the next Legislature.

RECIPROCITY WITH MEDICAL BOARDS. Texas has established reciprocity with the Medical Boards of Maine, Missouri, Nebraska and Maryland.

FOOT BALL CASUALTIES. The foot ball casualties up to date are 11 deaths and 98 serious injuries.

SEEKS A BROADER FIELD. The *American Journal of Orthopedic Surgery*, the only journal of its kind published in the English language, is to be enlarged.

NURSES GRADUATE FROM CHARITY HOSPITAL. On December 11, 1907, twenty-six nurses were graduated from the Charity Hospital. Archbishop Blenk made the address.

MEETING OF JACKSON COUNTY MEDICAL SOCIETY. The Society held a meeting recently at Pascagoula, Miss., and nominated Dr. J. A. Tabor to represent the sixth district on the State Board of Health.

SQUIBB'S MATERIA MEDICA. The JOURNAL has received an advance copy of Squibb's *Materia Medica*, the 1908 edition, published in commemoration of the fiftieth anniversary of the establishment of Squibb's Laboratories.

ELECTION OF OFFICERS ORLEANS PARISH MEDICAL SOCIETY. On December 14 the Orleans Parish Medical Society met and elected the following officers for the coming year: Dr. Amédée Granager, President; Dr. William Seeman, First Vice President; Dr. R. W. Salter, Second Vice President; Dr. C. W. Allen, Third Vice President; Dr. E. M. Hummel, Secretary; Dr. S. K. Simon, Treasurer; Dr. Homer Dupuy, Librarian; Dr. John J. Archinard, Dr. W. W. Butterworth and Dr. E. S. Walet, additional members of the Board of Directors.

Acting on the report of a special committee appointed to consider the refilling of prescriptions the following resolutions were adopted:

"1. No prescription containing 'habit-forming drugs', such as opium and its derivatives, chloral and its synthetics, cocain and its salts, hyoscin and its salts, could be refilled unless especially authorized by the prescriber.

"2. Other prescriptions could be refilled for the party for whom it was originally intended.

"3. If prescriptions were refilled for a third party and contained poisonous or dangerous drugs, these prescriptions must be labeled with the quantity and names of the poisonous ingredients, and with a poison label and skull and cross-bones."

The committee further recommended to the Society that its members regularly, in prescribing, give directions as to whether such prescription may be refilled or not, and place thereon the name of the patient.

NOBEL PRIZES IN MEDICINE AND PHYSICS. The Nobel prize in medicine is to be awarded to Dr. Laveran, of Paris, who is well known for his work on tropical diseases, and Professor A. A. Michelson, of Chicago, is to receive the prize in physics.

EXAMINATION FOR ASSISTANT SURGEON U. S. PUBLIC HEALTH AND MARINE HOSPITAL SERVICE. A board of commissioned medical officers will be convened to meet at the Bureau of Public Health and Marine Hospital Service, 3 B street, SE., Washington, D. C., Monday, January 20, 1908, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine Hospital Service.

Candidates must be between 22 and 30 years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character.

The following is the usual order of the examinations: 1, physical; 2, oral; 3, written; 4, clinical.

In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

The examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise consists in examination in the various branches of medicine, surgery, and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and natural sciences.

The clinical examination is conducted at a hospital, and when practicable, candidates are required to perform surgical operations on a cadaver.

Successful candidates will be numbered according to their attainments on examinations, and will be commissioned in the same order as vacancies occur.

Upon appointment the young officers are, as a rule, first assigned to duty at one of the large hospitals, as at Boston, New York, New Orleans, Chicago or San Francisco.

After five years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon.

Promotion to the grade of surgeon is made according to seniority and after due examination as vacancies occur in that grade.

Assistant surgeons receive \$1,600, passed assistant surgeons \$2,000, and surgeons \$2,500 a year. Officers are entitled to furnished quarters for themselves and their families, or, at stations where quarters can not be provided, they receive commutation at the rate of thirty, forty, and fifty dollars a month, according to grade.

All grades above that of assistant surgeon receive longevity pay,

10 per cent in addition to the regular salary for every five years' service up to 40 per cent after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For further information, or for invitation to appear before the board of examiners, address "Surgeon-General, Public Health and Marine-Hospital Service, Washington, D. C."

THE SOUTHERN MEDICAL COLLEGE ASSOCIATION held its annual meeting in New Orleans December 19. There were more delegates present this year than any previous meeting, all the schools except two were represented. There were five applications for membership in the Association by medical schools in the South. Three of them were accepted and two rejected. Those who were taken into the fold were Atlanta College of Physicians and Surgeons, represented by Dr. W. F. Westmoreland, Dean; Medical Department of the University of Arkansas, represented by Dr. James K. Lenow, Dean; College of Physicians and Surgeons, of Little Rock, represented by Dr. Joseph P. Runyon, Dean. The following officers were elected: Dr. Christopher Tompkins, Dean of Medical College of Virginia, President; Dr. W. S. Rogers, Dean of the Memphis Hospital and Medical College, Vice-President; Dr. L. C. Morris, Birmingham Medical College, Secretary and Treasurer; Dr. J. S. Cain, Sewanee, Tenn.; Dr. A. K. West, Oklahoma City, Okla.; Dr. T. H. Frazier, Mobile, Ala., members of the Executive Committee. Dr. Cain was chosen Chairman.

PERSONALS: Dr. L. Kaffie, having resigned the position of Assistant Superintendent at the Insane Asylum at Jackson, returned recently to his home. He is contemplating four years abroad in study.

Dr. Alfred Henry has been elected Business Manager and Treasurer of the *Indiana Medical Journal*.

Dr. Oscar Dowling, of Shreveport, recently lectured to the students of the State Normal School at Nachitoches.

Dr. Clarence Hutchinson has resigned the superintendency of the Touro Infirmary to continue medical work in Europe.

CHANGED LOCATION The following doctors have changed location lately: Dr. A. J. Newman, from Hillsdale to Mayer, La. Dr. J. B. Parrott from Zwolle to Branch, La. Dr. E. Bourgeois from Cinclare to Busby, La.

VISITING DOCTORS: Those who recently paid New Orleans a visit are Dr. B. B. Singletary, from Port Vincent; Dr. F. H. Caruth, Lobdell, and Dr. A. J. Perkins, from Lake Charles, La.

DIED: Dr. William E. Oats died on December 8, at his home in Vicksburg.

Dr. George Frederick Shradly died at his home in New York City on November 30, aged 70. Dr. Shradly was the founder of the *New York Medical Record*, and was editor-in-chief for thirty-nine years. For many years he was on the editorial staff of the *New York Herald*, devoting his attention to matters of medical and surgical interest.

OBITUARY: At the regular meeting of the Shreveport Medical Society, December 3, 1907, the following resolutions were offered on the death of our esteemed companion and member, Dr. J. J. Scott, who passed to his reward on the second of December, aged 70:

He was born in Edgefield District, South Carolina, and graduated in medicine from the Medical College of Georgia in 1856, emigrating soon after to Bossier Parish, Louisiana, where he practised until the outbreak of the Civil War, during which he served as assistant surgeon with honor and credit to himself until the end of the war, then resuming his practice.

He removed to this city in 1874, and was in active practice until his last illness. He was an honored member of our society, filling various positions from President down; was also for a long period of time a member of the Shreveport Board of Health.

He was always as a physician ethical in the highest sense of the term. The profession of Shreveport feels that in his death it has sustained the loss of one of its oldest and most respected members.

To his devoted wife, daughters and other relatives, we extend our heartfelt sympathy.

A MARTYR TO SCIENCE: A career of great promise has been cut short by the untimely death of Mr. A. Mactier Pirrie. He was born October 2, 1882. He obtained his B. Sc. with honors in anthropology at Edinburgh University in 1904, and qualified as M. B., Ch. B., in 1906. He obtained the Carnegie Research Fellowship in anthropology and was appointed anthropologist to the Wellcome Research Laboratories at the Gordon Memorial College, Khartoum. He went out to the Soudan in the autumn of 1906.

Under the direction of Dr. Andrew Balfour, the Director of the Laboratories, Dr. Pirrie made his first expedition up the Nile to the Southern limits of the Soudan and penetrated to remote parts of the Bahr-el-Ghazal. His second expedition took him to the borders of Abyssinia. On both occasions he passed through some of the most pestilential regions of Africa in connection with certain anthropological and physiological researches, appertaining to tropical diseases, upon which the Laboratories are engaged.

Unfortunately, he contracted tropical fever (kala-azar) and was so prostrated as to be compelled to return to England, leaving Khartoum on June 17th, last.

He rallied from the effects of the fever from time to time, but was compelled to enter Chalmers' Hospital, Edinburgh, in October, and died November 12.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

Hygiene of Nerves and Mind in Health and Disease. By AUGUST FOREL, M. D. Authorized translation from the second German edition, by HERBERT AUSTIN AIKENS, Ph. D. G. P. Putnam's Sons, New York and London, 1907.

The public interest in the study of psychology and the attempt to apply psychology to everyday life has led to the publication of many works by both medical and non-medical writers. Of these, with perhaps one exception, none tell the known facts and their possible applications as well as this book of Forel. Though intended for the general public, the book can be read with profit by the medical men.

VAN W.

Anatomy of the Brain and Spinal Cord, with special reference to Mechanism and Function, for students and practitioners. By HARRIS E. SANTEE, M. D., Ph. D. Fourth Edition. P. Blakiston's Son & Co., Philadelphia, 1907.

The importance of the anatomy and physiology of the nervous system as a preparation for the study of the clinical neurology is now generally appreciated. The number of works dealing with this branch has greatly increased, and special studies are so numerous that carefully prepared views are necessary for those desiring to commence such studies.

The present work gives the development of the nervous system and the gross anatomy. The accounts of the finer structure give the important known facts, and where possible the physiology of the various tracts. Much of the newer work has been included. It should prove useful to the beginner and to those desiring to increase their knowledge in a systematic way.

VAN W.

Diagnosis of Organic Nervous Diseases. By CHRISTIAN A. HERTER, Revised and Enlarged by L. PIERCE CLARK, M. D. G. P. Putnam's Sons, New York, 1907.

The popularity of Herter's work as an introduction to the clinical study of nervous diseases during the past fifteen years show that it served to fill a place of its own. The appearance of the second edition, incorporating the advances which have been made during that time should prove equally popular. A careful examination of the book shows that the revision has been carefully carried out. All the newer diagnostic aids are included, and value of the symptoms and clinical signs is stated as accurately as our present knowledge will permit.

VAN W.

Obstetrics. A Text-Book for the Use of Students and Practitioners. By J. WHITRIDGE WILLIAMS. D. Appleton & Co., New York and London.

In 1903 the first edition of Dr. Williams' splendid book was presented to the profession, and it was immediately accepted as a work embodying all that is meant by modern obstetrics. The most conspicuous feature of the book, certainly its chief value to a practitioner, is that it is thoroughly scientific, while being eminently practical. Dr. Williams also combines a vast obstetrical and laboratory experience with an extensive gynecological practice, thus making his conclusions upon surgical indications in obstetrics of immense value. No pains have been spared in illustrating the work. The drawings and illustrations are practically all from specimens in his own collection, and the representations of the various operative procedures have been redrawn from photographs.

A valuable feature, not often incorporated in text books, is the extensive bibliography added to each chapter. It would be difficult to find a better, or more extensive reference list, than Dr. Williams has compiled in this part of his work.

In this new edition many changes in the text will be found. There has been so much added to our knowledge of toxemias of pregnancy, metabolism of normal pregnancy, the surgical indications in contractions of the pelvis, and the development of the ovum that these chapters have been practically rewritten. It is interesting to note the rapid adoption of vaginal cesarean section as a rational surgical procedure, particularly in Dr. Williams' service. The section on this topic is well arranged and sets forth the advantages of the operation in a thoroughly practical way.

Another section well worthy of special mention is that devoted to puerperal infection. Here Dr. Williams gives another illustration of the happy combination of the laboratory scientist and the clinician. Nowhere else can be found a more comprehensive and yet condensed treatise on this subject...

The author's studies on metabolism of normal pregnancy and the toxemias of pregnancy have already attracted widespread attention. In these chapters his latest conclusions on the importance of the estimation of the nitrogen and ammonia coefficients and of the recent studies of the characteristic liver lesions, are put into practical form.

Another interesting study is pubiotomy. Dr. Williams believes that pubiotomy will practically displace cesarean section in the so-called border line cases, as it allows one to operate after the second stage pains have shown that the head cannot pass through the superior strait. It is just the opposite with cesarean section, the prognosis is worse the further advanced the labor is allowed to go before interference. Pubiotomy will also narrow the indications for the induction of premature labor and do away with the use of high forceps, version, or craniotomy in moderate degrees of contracted pelvis, when the mother and child are in good condition.

In conclusion, it must be said that the work is written in a clear, comprehensive and exact manner, and will no doubt continue the leading text-book among teachers and students.

MILLER.

Syllabus of Lectures on Human Embryology. An introduction to the Study of Obstetrics and Gynecology, with a Glossary of Embryological Terms. By WALTER PORTER MANTON, M. D. F. A. Davis Co., Philadelphia.

This is a small volume of one hundred and thirty-six pages in which an outline of the principal facts in human embryology are classified.

Throughout the book blank pages are arranged so that the student may

write further notes, or add diagrams. This is the third edition of Dr. Manton's book. The text has been carefully revised and much additional matter incorporated, so that it will no doubt continue to be found useful for the purpose for which it was intended.

MILLER.

500 *Surgical Suggestions*. By Drs. WALTER M. BRICKNER, B. S. M. D., and ELI MOSCHOWITZ, A. B. M. D. Surgery Publishing Co., New York, 1907.

From this multum in parvo volume can be culled many a practical hint. It is very attractively presented and is truly a pocket manual de luxe.

LARUE.

Manual of Surgery. By FRANCIS T. STEWART, M. D. P. Blakiston's Son & Co., Philadelphia, 1907.

Like all similar works, this book is a condensed clinical treatise. It consists of over seven hundred pages, with 504 illustrations. The busy practitioner and student will find it of value.

LARUE.

Fractures and Dislocations. By LEWIS A. STIMSON, B. A., M. D., LL. D. Lea Bros. & Co., New York and Philadelphia, 1907.

We reviewed two years ago the preceding edition of this standard work, and can but reiterate our hearty endorsement in welcoming this, the 5th edition, replete with additional information. The name of the Cornell Professor of Surgery is a stamp of authority on this branch of surgery.

LARUE.

Human Anatomy. By GEORGE A. PIERSOL, M. D., Sc. D. J. B. Lippincott Co., Philadelphia and London, 1907.

This very recent work on anatomy is presented in a single and somewhat bulky volume of over two thousand pages. It is, however, one of the best and most complete treatises of its kind.

Dwight, of Harvard, McMurrich, of the University of Michigan, and Hamman, of the Western Reserve, co-operated in this huge task, as well as Dr. J. William White, Professor of Surgery in the University of Pennsylvania, "whose ripe experience, both as a surgeon and as a teacher of surgery, has enabled him to point out with unusual force the relations of anatomy to the requirements of the practitioner."

Dr. John C. Heisler, Professor of Anatomy in the Philadelphia Medico-Chi, has largely contributed with the aid of his numerous dissections and preparations, which greatly enhance the value of the work.

There are seventeen hundred and thirty-four illustrations, of which more than fifteen hundred are original.

LARUE.

Modern Surgery. By ROSWELL PARK, A. M., M. D., LL. D. Lea Bros. & Co., Philadelphia and New York, 1907.

This work appears in one volume of about a thousand pages. It is the individual work of Roswell Park, aided materially by his collaborators of the Treatise on Surgery by American authors, which preceded, in 2 vols.

It is undoubtedly one of the best up-to-date works on the Principles and Practice of Modern Surgery.

Over 700 fine engravings and full page plates in colors are to be found throughout the volume.

Mention is made, with striking illustrations, of Vanghetti's recent cine-

matic or cineplastic procedure, which consists in utilizing tendon terminations left hanging from the amputated stump as a prosthetic device.

LARUE.

Treatise on Anatomy. By HENRY MORRIS, M. A., M. B. (London) F. R. C. S. (Eng.), and J. PLAYFAIR McMURRICH, A. M., Ph. D. P. Blakiston's Son & Co., Philadelphia, 1907.

In the November number of the JOURNAL appeared our review of the first two volumes of this work with mention that this treatise could be procured in one octavo volume. The names of the authors are sufficient guarantee for the excellency of the three other volumes we have perused.

Anatomy also has made strides within the last few years, thus accounting for the increasing number of text-books on that subject.

We must admit that, if the descriptive matter is no clearer than in the old text-books, the advance made in the art of illustrating render our recent anatomies more serviceable and practical.

Vol. III embraces the nervous system and organs of special sense.

Vol. IV the organs of Digestion, Voice, Respiration, Urinary and Reproductive Organs—Ductless Glands and Skin.

Vol. V deals with Surgical and Topographical anatomy. LARUE.

Publications Received.

D. APPLETON & CO., New York and London, 1908.

Modern Clinical Medicine. Diseases of the Nervous System. Edited by Archibald Church, M. D. An authorized Translation from "*Die Deutsche Klinik*" under the general editorial supervision of Julius L. Salinger, M. D.

F. A. DAVIS CO., Philadelphia, 1907.

A Text-Book of Practical Gynecology for Practitioners and Students, by D. Tod Giliam, M. D. 2d Revised Edition.

LEA BROS. & CO., Philadelphia and New York, 1908.

The Practitioner's 1908 Visiting List.

Surgical Applied Anatomy, by Sir Frederick Treves, Bart., G. C. V. O., C. B., LL. D., F. R. C. S. Fifth Edition, Revised by Arthur Keith, M. D., F. R. C. S.

Progressive Medicine. Hare-Landis. Vol. IV, Decemebr, 1907.

P. BLAKISTON'S SON & CO., Philadelphia, 1908.

The Physician's Visiting List for 1908.

Quiz Compend. *Compend of Surgery for Students and Physicians, Including Minor Surgery, and a Complete Section on Bandaging.* By Orville Horwitz, B. S., M. D. Sixth Edition.

W. T. KEENER & CO., Chicago, 1907.

Metabolism and Practical Medicine, by Carl von Noorden. Vol. II. *The Pathology of Metabolism,* by Carl von Noorden, H. Salomon, A. Schmidt, A. Czerny, H. Steinitz, C. Dapper, M. Matthes, C. Neuberg, O. O. Loewi and L. Mohr. Anglo-American issue under the editorship of I. Walker Hall.

W. B. SAUNDERS CO., Philadelphia and London, 1907.

Gynecology and Abdominal Surgery, edited by Howard A. Kelly, M. D., F. R. C. S., and Charles P. Noble, M. D. Vol. I.

The Pancreas; Its Surgery and Pathology, by A. W. Mayo Robson, D. Sc. (Leeds), F. R. C. S. (Eng.), and P. J. Cammidge, M. B. (Lond.), D. P. H. (Camb.).

Modern Surgery; General and Operative, by John Chalmers DaCosta, M. D. 5th Edition.

The Treatment of the Diseases of Children, by Charles Gilmore Kerley, M. D.

Treatise on Diseases of the Skin, by Henry W. Stelwagon, M. D., Ph. D., 5th Edition.

Surgery; Its Principles and Practice, by Various Authors. Edited by William Williams Keen, M. D., LL. D. Vol. II.

Practical Fever Nursing, by Edward C. Register, M. D.

Diseases of the Genito-Urinary Organs and Kidney, by Robert Holmes Green, A. M., M. D., and Harlow Brooks, M. D.

G. P. PUTNAM'S SONS, New York and London, 1907.

Mosquito Life, by Evelyn Groesbeeck Mitchell, A. B. M. S.

J. B. LIPPINCOTT CO., Philadelphia and London, 1907.

Abdominal Hernia; Its Diagnosis and Treatment by W. B. DeGarmo, M. D.

MISCELLANEOUS.

Transactions of the American Surgical Association. Vol. 25. Edited by Richard H. Harte, M. D. (Printed for the Association by Wm. J. Dornan, Philadelphia, 1907.)

Small Pox; Its Prevention, Restriction and Suppression. (Published by the Illinois State Board of Health, 1907.)

Laboratory Guide for the Modeling of the Human Bones in Clay, by Vibray Papin Blair, A. M., M. D. (Published by the Co-Operative Association of the Medical Department of the Washington University, St. Louis, Mo., 1906.)

Thirty-Seventh Annual Report of the Secretary of State on the Registration of Births, Deaths, Marriages and Divorces in Michigan for the Year 1903. George O. Prescott, Secretary of State. (Wynkoop Hallenbeck Crawford Co., Lansing, Michigan, 1907.)

Circular 118 of the Board of Health of the State of New Jersey. September, 1907. *Public Health Laws*. (The John L. Murphy Publishing Company, Trenton, N. J., 1907.)

Essays on the Probable, the Possible, the Impossible, by William Sandel, M. D. (J. G. Hauser, New Orleans, La.)

A Timely Article on the Business Situation of Deep Interest to Every Business Man, by Samuel E. Moffett. (Collier's Issue of November 30, 1907.)

Reprints.

The Treatment of Recent Trachoma, by Thomas A. Woodruff, M. D., C. M.

Intestinal Perforation in Typhoid Fever; Its Diagnosis and Surgical Treatment, by J. E. Allaben, M. D.

A Medical Career and the Intellectual Life; (2) The Eyes and Eyesight of Birds, with Especial Reference to the Appearances of the Fundus Oculi, by Casey A. Wood, M. D.

Gonorrheal Prostatitis, by J. Bayard Clark, M. D.

British Pharmaceutical Codex.

MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Report of the Board of Health of the City of New Orleans.
FOR NOVEMBER, 1907.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	9	3	12
Intermittent Fever (Malarial Cachexia)	2	1	3
Smallpox.....			
Measles.....			
Scarlet Fever.....			
Whooping Cough.....	2		2
Diphtheria and Croup.....	9		9
Influenza.....	2	2	4
Cholera Nostras.....		1	1
Pyemia and Septicemia.....	1		1
Tuberculosis.....	43	33	76
Cancer.....	9	6	15
Rheumatism and Gout.....		1	1
Diabetes.....	1		1
Alcoholism.....	1		1
Encephalitis and Meningitis.....	5		5
Locomotor Ataxia.....	2		2
Congestion, Hemorrhage and Softening of Brain.....	25	4	29
Paralysis.....	5	1	6
Convulsions of Infants.....	4	4	8
Other Diseases of Infancy.....	19	8	27
Tetanus.....	4	3	7
Other Nervous Diseases.....	1	1	2
Heart Diseases.....	46	38	84
Bronchitis.....	7	7	14
Pneumonia and Broncho-Pneumonia.....	26	27	53
Other Respiratory Diseases.....	4	1	5
Ulcer of Stomach.....			
Other Diseases of the Stomach.....	6	2	8
Diarrhea, Dysentery and Enteritis.....	20	8	28
Hernia, Intestinal Obstruction.....		1	1
Cirrhosis of Liver.....	7	2	9
Other Diseases of the Liver.....	3	3	6
Simple Peritonitis.....	2		2
Appendicitis.....	5		5
Bright's Disease.....	28	25	53
Other Genito-Urinary Diseases.....	3	3	6
Puerperal Diseases.....	9	4	13
Senile Debility.....	18	2	20
Suicide.....	8	1	9
Injuries.....	33	16	49
All Other Causes.....	9	7	16
TOTAL.....	378	215	593

Still-born Children—White, 17; colored, 27; total, 44.

Population of City (estimated)—White, 251,000; colored, 90,000; total, 341,000.

Death Rate per 1000 per annum for Month—White, 18.07; colored, 28.66; total, 20.87.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure..... 30.12
Mean temperature..... 59.
Total precipitation..... 4.96 inches.
Prevailing direction of wind, northeast.

*Paullum sepulchre distinet herbarie
Celata virtus. — HORACE.*

New Orleans Medical and Surgical

Journal

ESTABLISHED IN 1844.

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THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE SOUTH

A Southern Medical College Association, Graded, Graduating Summer School of Medicine, situated on the Cumberland Plateau, Tennessee, 2,000 feet above sea level, will open its sixteenth course of lectures on April 2, 1908, and close the last of the succeeding October.

Four courses of lectures will be required before graduation, with legal intervals; when a full or partial fourth course has already been taken, no interval will be required.

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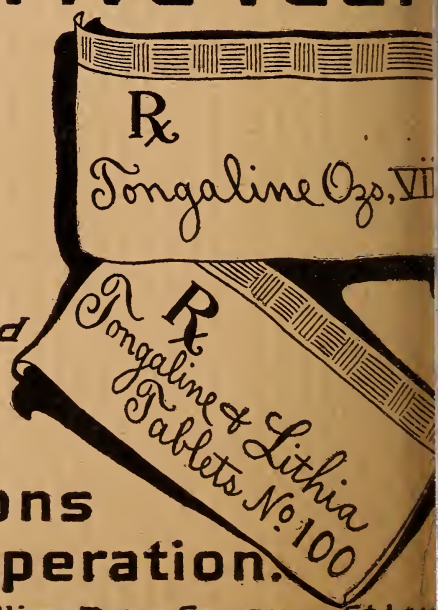
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FEBRUARY, 1908.

No. 8

Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a **WRITTEN** order for the same accompany the paper.)

Acute Dilatation of the Stomach as a Post-Operative Complication.*

By DR. C. JEFF MILLER, New Orleans, La.

Among the unexpected complications that may arise after surgical operations no condition has furnished a more distressing chapter than acute dilatation of the stomach.

To one who has not had occasion to deal with this complication, or taken sufficient interest to investigate the published clinical records, it might appear that the subject was one of more interest to the internist than the surgeon. Sufficient evidence has long since accumulated, however, to prove that the surgeon will meet with more than half of the cases; that it may promptly follow minor surgical procedures, and may rapidly lead to a fatal termination.

*Read at Meeting Louisiana Surgical and Gyneological Association, New Orleans, November, 1907.

Authorities generally attribute to Hilton Fagge the first definite description of the clinical features of this condition.

It seems, however, that Campbell Thompson's first collective study of all cases published up to 1902 aroused more interest in the subject than any other contribution prior to that time. He was able to collect 44 cases, most of which appeared as autopsy reports.

In discussing the cause of this affection he divided the cases into five groups, viz.:

1. Those in which dilatation occurred without apparent cause;
2. Those in which, after death, some other lesion was found;
3. Those where some gross indiscretion in diet seemed to be the chief cause;
4. Those in which dilatation followed an injury;
5. Those that followed a surgical operation, no other lesion being demonstrable at the autopsy.

Of these various groups only the last one is to be considered, the one of special interest to surgeons, since it contains the majority of the reported cases and is most frequently met with as a sudden, unanticipated, and occasionally late, complication of surgical operations.

Of Thompson's 44 cases, 12 followed surgical operations, of which 6 were abdominal. The remaining 6 followed operations varying from a breast amputation to a resection of the ankle.

Simpson (F. F.), in a recent contribution, states that 80 additional cases have been reported since Thompson's article (1902), 40 of which followed abdominal (including kidney) operations. This would show that the condition is being recognized oftener and that possibly many cases were formerly overlooked and either died, or were so mild as to recover and be classed as an ordinary gaseous distention, as is often noted after general anesthesia.

Of all publications at my command, that of Lewis A. Conner is the completest and most valuable. He found that prior to March, 1907, 102 cases had been reported, 41 per cent of which followed operations performed under general anesthesia. Nearly one-third of these cases (15), followed various operations upon the gall-bladder and bile passages, while all other abdominal operations furnished only 17, or two more than the liver series.

From scattered clinical reports at my disposal, it seems to occur

with peculiar frequency after kidney surgery. An interesting instance of this type is reported by Halstead, of Chicago, in which acute dilatation followed fixation of the kidney.

Injuries involving the central nervous system, and deformities of the spine have furnished another interesting group. Conner found six cases complicating deformity of the spine.

Bloodgood mentions two cases reported by Neck (probably not in Conner's series) of two kyphotic subjects developing the condition after over-indulgence in food, and mentions others that developed after the application of plaster paris jackets.

Conner also calls attention to the curious fact that the literature did not reveal a single instance of this complication following operations on the stomach itself. Since his publication, however, Bloodgood has recorded two instances where dilatation followed stomach operations. In one case, acute gastro-mesenteric ileus followed a pyloroplasty (Finney's method), and, in another instance, after gastro-duodenostomy.

It is important to mention here the possible influence of anesthetics and their comparative dangers. It has been shown that in almost all of the cases in which the nature of the anesthetic was mentioned, chloroform had been administered. In one instance, ether preceded by nitrous oxid gas was used. In other cases Conner thinks that while the anesthetic used was not mentioned, it was altogether probable that ether had been employed.

In Halstead's case morphin-ether anesthesia was used.

PATHOLOGY: The postmortem findings have been so variable and yet so constant in certain features that several theories are necessary to explain the complex mechanism of acute dilatation.

It must be accepted that many cases are not primarily a paralysis of the stomach wall, but develop as a result of mechanical obstruction at some point beyond the stomach. It is necessarily of importance to inquire as to the frequency of mechanical obstruction, since any effort at treatment depends upon the cause. The obstruction is rarely ever at the pylorus. Conner found the duodenum reported as dilated in 55 per cent of 69 autopsies and thinks it probable that in some a dilated state of the duodenum was overlooked.

The next interesting feature was, that exactly one-half of the

cases in which the duodenum was found dilated, the point of obstruction existed at the crossing of the duodenum behind the root of the mesentery, or, in other words, at the duodeno-jejunal junction.

It is impossible to discuss at length the mechanism of gastromesenteric ileus.

Albrecht accepted Glenard's suggestion, viz.—that an over-distended loop of small intestine may by traction upon the mesentery convert the mesenteric artery into a constricting band at the duodeno-jejunal junction. It is also possible that an over distended stomach pressing the intestines downward may create a **similar** constriction.

Albrecht investigated this phase of the subject on the cadaver and found that the terminal end of the duodenum is normally flat, owing to the overlying mesentery, and also, that traction on the mesentery in the direction of the pelvis could cause complete occlusion of the bowel.

Conner also investigated the subject on 10 cadavers and his conclusion is that in a certain proportion of normal individuals a pull upon the mesentery approximating, in direction and force, that which might be exerted by the empty small intestines hanging in the true pelvis, can produce obstruction at the lower end of the duodenum which will require considerable force to overcome.

The other type of cases can only be explained by accepting the theory of primary paralysis of the stomach wall, most probably through the splanchnics. This may be caused by anesthetics, or other toxic agents. The chief features to be worked out are first, the paralytic condition, and, second, the hypersecretion, which plays a prominent role. Opinions differ as to which is primary, or whether one is dependant upon the other.

Which ever is the cause, the result is the same, a vicious circle is established.

Hypersecretion may be accounted for in several ways. It may be the result of Nature's effort to eliminate poisons usually removed by the kidneys and liver, or a terminal manifestation of grave toxemia. It might also be the secretion of the liver and pancreas regurgitating into the stomach because of the duodenal obstruction.

Simpson states that in a considerable number of the recorded fatal cases, the kidneys have actually been operated upon; and in many other cases the statement has been made that the urine was scant, or loaded with albumin and casts.

The most constant feature noted at postmortem is the enormous size of the stomach. It is often found extending into the pelvis, usually filling the abdomen and pushing the small intestines down into the pelvis. The musculature may, or may not, present changes. Hemorrhage often occurs into the muscular layer; in other instances, the muscle fibers are torn apart, while in some, nothing more than an unnatural thinning of the wall can be demonstrated. The mucosa occasionally shows superficial erosions.

The shape of the distended stomach seems characteristic. A sharp, angular, bend is found in the lesser curvature, which converts the organ into a tight V, or U-shaped cylinder, the cardiac end extending downward, the pyloric end upward and to the right.

PROGNOSIS: One must conclude from the various autopsies mentioned in the reports that acute dilatation of the stomach is probably as serious as any postoperative complication that may arise.

The latest statistics (those gathered by Simpson) showed that of 128 cases, 86 died, apparently yielding a mortality of 69 per cent. Kayser's collection of 60 cases, quoted by Bloodgood, yielded 71 per cent of deaths.

Conner's exhaustive study of 102 cases showed 74 deaths, or 72.5 per cent deaths and 28 recoveries.

All of these authors, including Halstead, express the belief that such figures do not represent the true ratio between the patients that die and those that recover, for undoubtedly a large number of cases pass unnoticed.

SYMPTOMS: The recognition of acute dilatation of the stomach should not be difficult. There are three constant and striking symptoms, vomiting, pain, and abdominal distension.

The first of importance is vomiting. It appears to be the first symptom, and usually continues throughout the attack, increasing in severity as the case progresses. The most noticeable feature of the vomiting is the large quantity of fluid ejected. Several

quarts may be vomited in a few hours. It is usually thin, oftenest of greenish color, but may be brown and may contain some blood. Conner mentions as a feature of great diagnostic importance, that the vomitus may be foul smelling, but rarely feculent. There is a large quantity of bile in the vomitus when the stenosis is below the ampulla; this is especially true of post-operative dilatation. In all forms of dilatation after copious vomiting the abdomen is flat, and there is usually marked relief experienced.

The character of the vomiting is not sufficient to allow a differential diagnosis between acute gastro-duodenal dilatation and high obstruction of the bowels. Bloodgood states that in high intestinal occlusion, initial pain, accompanied by peritoneal shock which may later somewhat disappear, and vomiting without marked distention are the symptoms which differentiate it from acute dilatation. In the latter, the initial pain is absent; the patients suffer from epigastric distress; the collapse is gradual and progressive, the most characteristic feature is the abdominal distention beginning in the epigastrium, and in some cases, extending to the pubes. In high intestinal obstruction, he found epigastric distention a very late symptom and had not found great distention present at the operation.

Distention is nearly always present; splashing sounds are quite frequently heard; thirst is intense in most cases; and the urine is greatly diminished in amount. Visible peristaltic waves are not often present, obstinate constipation is the rule, and the temperature is almost always normal, or subnormal. Rapid collapse is a striking feature and may account for some of the mistakes in diagnosis.

If there is any doubt as to the condition, the introduction of a stomach tube will usually confirm the diagnosis. A quantity of gas may escape, but, usually large amount of fluid containing bile and pancreatic juice will be syphoned off. An abundance of fluid without fecal matter denotes duodenal obstruction. Halstead states that the abdomen becomes distended, but dull on percussion, instead of being tympanitic, as in ileus, either from inflammation, or from paralysis of the intestine without peritonitis.

TREATMENT: The treatment may be summed up in a few words: early recognition, prompt emptying and washing of the

stomach, and such posture as may release a mesenteric compression. To these may be added any eliminative measure indicated if the emunctory organs are inactive.

Early diagnosis is essential to successful treatment. The cases reported as cured were instances in which the trouble was promptly recognized, and most authors predict a much lower death-rate when the surgeon recognizes the frequency of such a complication and institutes early treatment. Whatever the cause may be, the strongest indication is to thoroughly empty the stomach by means of the stomach tube and continue lavage at regular intervals. Nothing should be administered by mouth. Nourishment and fluids should be supplied by rectal enemata. The large amount of fluids lost through the stomach may be replenished by saline infusion.

Since the majority of cases result from duodenal obstruction, it is necessary to attempt the release of the compressed bowel. Postural treatment seems to be quite satisfactory in many instances. The first cure of obstruction reported was accomplished by turning the patient on the abdomen. The knee chest position would be excellent if the patient can be so placed. Several instances are reported in which the position was assumed for fifteen minutes, every two or three hours, with satisfactory results.

OPERATIVE TREATMENT: Judging from the cases reported in which operation was done with the idea of relieving obstruction, surgery is not encouraging. In severe cases, when other measures have failed, surgical measures are strongly indicated, but both Simpson and Conner state that so far none of the patients survived. Bloodgood advocates gastro-jejunostomy if the dilatation ends at the pylorus, or duodeno-jejunostomy if the duodenum is involved. Borchardt doubts if any good can be accomplished by operative measures in severe cases. Drainage of the stomach either by fistula or gastro-jejunostomy certainly appears rational, and its success would depend upon the patient's condition at the time of the operation.

Unfortunately, collapse follows the initial symptoms so rapidly, as a rule, that operation will usually be too late.

In spite of the high mortality, however, there is strong evidence to prove that many cases can be saved by prompt treatment.

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The following brief notes are given of a case:

Mrs. S. was admitted to the N. O. Sanitarium for the relief of chronic suppurative disease of the adnexa arising from gonorrheal infection four years prior to the operation.

She was 27 years of age, the mother of one child and gave a good personal and family history except that she was slightly lame as result of an injury to hip during early childhood.

After curettage, the abdomen was opened and both tubes and left ovary were removed. A gauze drain was placed in the vaginal vault. She recovered promptly and showed no distress until 24 hours after the operation, when the pulse rapidly increased in rate from 80 to 150. Nausea was severe and vomiting soon commenced. Large quantities of greenish colored fluid were ejected and she rapidly passed into collapse. Fluid literally ran out of her mouth, although she had been taking very little liquids.

Her chief discomfort seemed to be intense thirst. The urine was of a brown color, loaded with albumin and greatly decreased in amount. The pulse rose to 165 and continued after the stomach was emptied.

The abdomen showed a dome-shaped protrusion which filled the abdominal cavity as low as two inches below the umbilicus, and palpation gave rise to considerable pain.

The lower portion of the abdomen was flat, free from gases and not sensitive to pressure. The temperature was subnormal. A diagnosis of dilatation of the stomach was made and a stomach tube was introduced. Over a quart of bile-stained fluid was drawn off and some gas escaped. Lavage was then completed with saline solution. She immediately felt relieved, but in three hours vomit-

ing began again and the thirst increased. The stomach was again emptied of a pint and one-half of the same type of fluid. Some four hours later the condition seemed to be returning and she was then rolled on her side and placed as nearly in the knee chest position as her condition would permit, with pillows placed about her. She immediately expressed the belief that she was better and her condition rapidly improved. The stomach was washed a third time, after which she rested comfortably, and in two days her condition was practically that of the average abdominal section. She left the institution on the eighteenth day.

Stricture of the Male Urethra.

By DR. HENRY G. SPOONER, Stanton, Florida.

While we have transitory conditions, such as the so-called inflammatory strictures, which are caused by swelling and edema of the mucous membrane, also compression strictures, when the folds of the urethra are encroached upon from without by abscesses, hemorrhages, or by an enlarged prostate, and urethrospasmus, caused by strong irritation in the urethra, or its vicinity, we reserve the term "stricture" for an organic and permanent narrowing of the normal dilatability of the urethra.

According to their cause, strictures may be divided into two groups: (1) Inflammatory strictures, and (2) traumatic strictures. Christen mentions other causes, but they are unimportant.

As chronic gonorrhea is the most evident cause of the first group, these strictures are commonly called gonorrheal strictures. Of the 1,330 cases of stricture reported by Thompson, Desnos, Martens and Christen, 1,157 were caused by clap. As not every clap leads to a stricture, we are forced to assume that harsh medical treatment causes one patient to get a stricture, while his more fortunate contemporary, who is more scientifically treated, escapes; that the injections now used, such as the newer silver compounds, by preventing the chronicity of gonorrhea, prevent the formation of stricture.

Tertiary syphilis, in the form of a gumma, chancres of the meatus and urethra, also tuberculous ulcers, may lead to the formation of strictures, but these conditions are rare, occurring in only 1.25 per cent of the cases, according to Christen.

We next come to traumatic strictures. Blows, or falls on the perineum, arising in all possible ways, may lead to the formation of strictures. A tear in the urethra may occur with or without outer wounds. A callus forms and leads through the contraction of scar tissue to a narrowing of the normal dilatability of the urethra at the location of the injury, but according to the combined statistics of Thompson, Desnos, Martens and Christen, there were 90 traumatic strictures to 1,157 of gonorrheal origin, or one traumatic stricture to 12.85 of gonorrheal origin.

Fractures of the pelvic bones are very often complicated with a torn urethra. Nearly all these injuries pass through the pars fixa urethræ, while the pendulous portion is hardly ever involved, however the latter portion may be ruptured in cases of chordee, owing to an attempt by the patient in his anguish to straighten the curved penis.

Bullet wounds of the urethra are very rare—there were only 105 cases in our Civil War. In the Franco-Prussian war there were only eight cases. In the Greco-Turkish War only one case was reported by Kuttner from the bureau of war. Kaufman could gather only 16 cases in addition to the American ones. In these cases the prognosis is very unfavorable, as grave complications nearly always set in.

Any foreign body that passes through the urethra, or lodges in the urethra, may cause a tear which leads to suppuration and when cicatrization sets in leads to the formation of a traumatic stricture.

The anatomy of the urethra has been described in the various text-books and the pathology is the same as described under chronic urethritis and the healing of wounds.

While traumatic strictures are single, gonorrheal strictures, on the contrary, are often multiple, however, it is rare that more than three strictures can be found in the urethra. Out of 606 cases collected by Martens and Christen, as many as three strictures were found in one urethra only in seven patients.

The position of a stricture is dependent upon the situation of the pathological process that caused it. The traumatic stricture develops where the urethra was torn. As wounds which lead to tears of the urethra occur mostly in the region of the perineum, traumatic strictures occur most often in this location.

The gonorrheal stricture develops in the place where the chronic inflammatory process has reached its greatest intensity. Sixty-seven per cent of Thompson's cases were found in the bulbo-membranous portions of the urethra. Dittel said: "Of all places, according to my experience, the bulb is the seat of selection and particularly the posterior half and beginning of the membranous part." According to his investigations, 70 per cent of the strictures occur in this part of the urethra. Desnos states: "In nearly all my cases, the cul-de-sac of the bulb was the location, 15 exceptions were cases of traumatic strictures." Eighty-nine and one-tenth of Christen's cases occurred in the bulbous and membranous urethra.

The bacteria present in these cases of urethral suppuration have been previously described by the author in another medical journal.

While a traumatic stricture develops in a seemingly short period after the urethra has been torn, a long, or a very short period of time separates gonorrhea from the first symptoms of the stricture. A stricture can be well advanced without causing the patient much suffering. This narrowing slowly and insidiously develops, causing a painful and slow urination or the patient may be compelled to consult his physician owing to retention, or cystitis. One hundred and sixty-three of Christen's cases came to the clinic to find out about some other condition, when the diagnosis of stricture of the urethra was made. A muco-purulent discharge may begin, or persists, notwithstanding the fact that a few months, or many years may have elapsed since the cessation of acute gonorrhea. In spite of the constancy of this secretion in the morning, the patient does not begin to realize that he has a stricture until his stream of urine has become somewhat diminished in volume. Very often the patient neglects his condition until he must strain greatly to empty his bladder, as the symptoms come on slowly and gradually increase in severity. As the stricture contracts, the patient must take more time to empty his bladder and must pass a smaller amount of urine at more frequent intervals. By assuming various positions, by straining, he endeavors to pass his water easily, until the accessory muscles of the abdomen and thorax fail to accomplish this happy result. Finally the urine, if it comes at all, is passed with the greatest difficulty. The agony of the

patient caused by this painful strangury permits of no rest, yet in spite of straining and terrible suffering not one drop of urine can be void.

After the wall of the urethra has become contracted by fibrous degeneration it will not become normal again so that a very guarded prognosis is to be made. Often, if any instrument is passed into the bladder, the prognosis of cystitis is to be made. Nevertheless, cystitis, pyelitis, abscesses and fistulae will yield to appropriate treatment of the stricture.

While medical treatment renders us valuable service for any constitutional diseases that may be present, any attempt to cure extensive deposits of connective tissue by any medicine given internally cannot be successful, unless the urethra is restored to its normal diameter of dilatability. Such a result can only be accomplished by surgical treatment and, as in all surgical cases, the simplest and safest procedures must be tried first. Slow, gradual dilatation has been employed since the 16th century, and is the method most generally used, other methods being resorted to only after this method has been tried and failed. The best sounds for this purpose are those of the scale of Béniqué, as the single numbers increase in size only 1-6 mm. As soon as the sound has passed any constriction it has accomplished its purpose and must be as gently withdrawn as it was inserted. The length of time the dilatation treatment must be continued is dependent upon the amount of infiltration determined by endoscopic examination. If after the passage of an elastic filiform bougie, or sound dependent upon the extent of dilatability of the urethra, there is a reaction with chills and fever, owing to the introduction of pyogenic micro-organisms, no further dilatation must be attempted until the inflammation has disappeared. If all is well, the same number and one size larger is used on the succeeding visits, as the inflammation and inflammatory reaction permits, until a sound that passes the meatus externus passes over any obstruction easily. As the meatus is the least dilatable portion of the urethra, the Oberlander and Kohlmann dilators must be used to dilate the different parts of the urethra that have a greater diameter of dilatability than the meatus, in order to carry the after-treatment far enough as has been done in Burckhardt's clinic in Basel.

Forced dilatation has now become obsolete on account of the damage done by forcibly pushing a sound through an obstruction in urgent cases of retention. Cauterization or the burning through of a stricture has only an historical interest.

Electrolysis, first employed by Crusell and Wertheimer (1841) and warmly endorsed by Newman (1890), has more recently been recommended by a number of authors, among whom may be mentioned Selhorst (1905), who claims that his results are excellent, but this method of treatment cannot be recommended by the writer.

Meatotomy is indicated when the meatus externus is congenitally small, or when it has become contracted so as to permit of better treatment of the stricture. Meatotomy consists in making a cut between the two lips of the meatus externus, inferiorly with an ordinary scalpel, or with the Kohlmann meatotome.

Internal urethrotomy consists of cutting a stricture within the urethra and may sometimes be employed, but must always be followed by an after-treatment. The point to be emphasized is to have the penis well elevated before making the incision, so as not to cut too deeply. If the cut is made along the over wall of the urethra the bleeding will not be so intense. The instruments commonly used for this operation are the Maisonneuve, which cuts anteriorly, posteriorly, and the Albarran, which cuts posteriorly, anteriorly, and, of course, to use any urethrotome it is necessary that the instrument pass the stricture. The mortality, according to reliable authorities, varies between one-half and two per cent.

External urethrotomy is divided into two subdivisions, according as the stricture is passable for a sound, or bougie, (1) the operation with a guide, (2) the operation without a guide.

The first operation is done when the stricture is passable for a sound or bougie. A sound is passed into the urethra, an incision is then made through the median raphe of the perineum, the cutting edge of the knife being held perpendicularly to the shaft of the sound, until the incision has been made to the juncture of the stricture and the sound. The introduction of a larger sized sound completes the operation. Or a rubber drainage tube can be inserted through the perineal wound into the bladder. A moist dressing of sterilized gauze is then applied.

The operation without a guide is more difficult. The patient is placed in the lithotomy position, a thick metal sound is passed to the level of the stricture and held by an assistant in the median line. An incision is made in the median line between the margin of the anus and scrotum. The skin, superficial fascia, the fascia of Colles and the deeper structures are severed by parallel cuts of the knife strictly in the median line, until one can feel the end of the sound in the urethra. The edges of the wound are held apart with retractors; the urethra is carefully dissected out and the wall of the urethra in front of the stricture is cut open; the lumen of the stricture is now sought for and, if found, is cut through by the scalpel. I have often found, after trying for the entrance to the stricture for a time with small filiform bougies without success, that a good sized sound would glide through its opening.

If all our efforts have been in vain the patient may be allowed to come out of his ether sufficiently to urinate. Then if a bougie cannot be passed through the lumen with the help of the flow of urine to show us the opening, and every conceivable attempt has met with failure, we can make a supra-pubic incision into the bladder and pass a bougie from the orificum internum through the lumen of the stricture.

After operation a rubber catheter is placed through the wound into the bladder. At the end of five days the catheter can be withdrawn as a wound canal has formed. The bladder and urethra are left at rest for about two weeks, while the wound is antiseptically dressed. The wound generally heals without any casualties.

This operation has severed the bands of connective tissue, thus permitting of the free passage of urine, but no lasting cure has been accomplished, so that in three to four weeks after the operation a careful after-treatment must be instituted. The mortality varies between two and seven per cent.

After noting that stricture of the male urethra is caused in the overwhelming number of cases by chronic gonorrhea, it can be readily understood in the case of any patient, who comes to us with a history of chronic urethritis, we must consider the pathological alterations that are present in the urethra, especially if there has been a history of former roughly-treated or neglected

chronic claps. In the great majority of these cases no accurate and continuous examinations are made to determine the presence of gonococci, and even after the most painstaking examinations, continued every day for a long period of time, we are often left in doubt as to the most appropriate form of treatment to apply. If extensive deposits of connective tissue have been determined, whether dating from an old clap of years ago, or from a recent one in the first months of its chronic period, then the physician should not have his mind centered upon astringent injections, but should consider the prevention of any further contraction of scar tissue.

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P. L. Thibaut, M. D., Chairman.

The Treatment of Coxitis.

By DR. PAUL A. McILHENNY, of New Orleans.

Coxitis, or tubercular disease of the hip joint, may be divided into three classes, according to the condition that happens to be present when the patient applies for treatment:—

First—Cases that are in the initial, or incipient, stage of the disease, in which the joint is merely sensitive, and there is no definite change in the joint structure and no deformity.

Second—Cases in which there is some definite change in the structure of the joint, and some deformity due to muscular contraction with, or without, abscess.

Third—Cases in which the disease is quiescent with fixed deformity due to marked muscular contraction and fibrous or bony ankylosis.

The first and principal point in the treatment is to cure the disease, and our most important tasks are to prevent or alleviate pain, to prevent or correct deformity, and to obtain a result that will give a functionally serviceable limb, with motion in the hip joint if possible.

Unfortunately the orthopedic surgeon very rarely has the opportunity to begin treatment on a case of coxitis of the first class, or on one in which the disease has not already progressed to the stage where there is muscular contraction. This is greatly to be deplored, for the length of the treatment and the prognosis as to a functional result are markedly influenced by the condition existing at the time treatment is begun. If we begin treatment when the disease is in the incipient stage, it is very safe to say that in the majority of cases, the child will be practically cured at the end of one year, and that only a light brace will be necessary for some months longer in order to give a slight protection to the joint, and better insure a satisfactory result. Whereas, if the disease has progressed to the stage of muscular contraction or spasm, the treatment may last at least for three years, and in many cases much longer, and result in fibrous or bony ankylosis.

It is generally accepted all over the world that it is impossible to have motion without friction; therefore, as any friction of an inflamed surface increases the trouble, motion should be restricted as completely as possible so as to give nature every possible chance of helping to cure the disease. If one should follow the course of an untreated case of tubercular hip disease, it would be seen that as soon as the joint becomes at all sensitive, nature exerts herself and endeavors to splint the joint by involuntary contraction of all the muscles and bands about the joint, so that motion is only allowed to the point where friction of the diseased joint surfaces begins. As the disease progresses this muscular splinting gradually becomes more perfect until the joint is immovable except when the patient is asleep. Later on as more of the joint surfaces become involved, the muscles become more contracted and adhesions set up which hold the limb perfectly stationary until fibrous or bony ankylosis has developed, or a pathological dislocation has occurred due to erosion and absorption of the head of the femur and the rim of the acetabulum. So may we well learn from nature that in such cases fixation is indicated. Except in cases belonging to the first class immobilization with extension or suspension should always be used, and we must employ some apparatus, splint or bandage that will fulfil these conditions as nearly as possible, and at the same time allow the patient to be out in

the fresh air and sunshine, for tubercular disease of the hip is not a condition to be treated in a sanitarium. The numerous braces, etc., that have been given to the profession during the past thirty or forty years are excellent in many ways for cases that are in the quiescent stage of the disease, but all of them have one common fault in that they do not completely immobilize the joint, which, in my mind, is the most important point in the treatment; for so long as we allow motion in the diseased joint just so much longer is the treatment going to be protracted, and the prognosis naturally less favorable.

Should we be fortunate enough to see the case in the initial stage of the disease, before the joint structure has been damaged, we may immobilize the joint without extension or suspension, and obtain a very good result, as has been clearly and definitely demonstrated by Hoffa and Lorenz. For such a condition I know nothing that answers the purpose so well as a plaster of paris spica bandage of the pelvis and thigh which runs from the umbilicus to the knee, being well-molded over and around the crests of the ilia. If there has been any muscular spasm the child should be put to bed for a few days, with extension applied to the diseased limb, by means of a weight and pulley arrangement, before the plaster bandage is put on, this will relieve the muscular spasm and make the application of the bandage much easier for the surgeon, and less painful to the patient. When the muscular spasm has disappeared, the patient is supported on a pelvic rest attached to the end of the table, and a pillow is placed under the shoulders and head so that the whole portion to be bandaged will be unobstructed; a pair of closely-fitting gauze drawers are put on, and all bony prominences are well padded with cotton batting or piano felt; one or two layers of batting are rolled around the thigh and pelvis from the knee to the umbilicus, and a gauze bandage applied to hold the padding in place. The limb is now slightly flexed, abducted and rotated outward so as to give the best position for walking. The plaster bandages are then applied, six to ten being enough for a child of five to eight years of age; reinforcements of tin or wood strips may be put over the groin and buttock; but if a few extra turns of the bandage are made around those parts it will generally be strong enough. When the plaster has set, the

edges about the knee, genitals, abdomen and back are trimmed and the drawers drawn over the edge of the cast and sewed so as to protect the edges and keep them smooth. At the knee the bandage is trimmed away enough posteriorly to allow flexion to a right angle, and anteriorly just above the upper end of the patella. This will allow motion at the knee joint, and thereby partially prevent the excessive atrophy often seen in these cases. The child is allowed to walk, and is kept under the close supervision of the surgeon for a week or two when, if no symptoms showing further progress of the disease appear, it is sent to the country if possible. This short spica with motion at the knee joint is only applicable to those cases which present no, or possibly slight muscular spasm, and in which the disease has not attacked the joint surfaces. The absolute fixation of the joint gives nature a favorable opportunity to combat the disease, and motion at the knee causes more nutrition to be brought to the part, while it does not allow sufficient pressure to cause damage.

In cases of the second class we always have one, and often two serious problems to solve: 1st, the contraction deformity that is always present; and 2d, abscess which occurs in about 50% of the cases. In this class our attention must be centered upon, 1st, the immobilization of the joint; 2d, the correction of flexion deformity or other malpositions; 3d, the separation of the joint surfaces by traction; and 4th, the possible treatment of abscess.

The importance of immobilizing the joint has been mentioned, and the necessity of correcting any malposition is self-evident. In separating the joint surfaces we cause a separation of the diseased areas, more perfectly fix the limb, and lessen any pain that might be caused by pressure due to muscular spasm, thereby retarding the progress of the disease and consequently hastening a cure. Many surgeons claim that extension is not at all indicated, and that it does harm in many cases; this I consider rather severe criticism, as I have yet to see a case that was not relieved by traction. I do not think that it should be kept up through the whole course of the disease, as it necessitates disuse of the whole limb and consequently causes atrophy, but I am convinced that extension should be maintained until the extreme sensitiveness of the joint has been relieved. When we have succeeded in gaining this much we may

allow more freedom to the limb, provided the hip joint is kept stationary. What Lorenz terms his "suspension treatment" with his iron stilt is nothing more or less than extension brought about by the weight of the hanging limb, except that while in the recumbent position there is no suspension. Call it what we may, the result is the same.

If there is marked contraction deformity, it will be necessary to anesthetize the patient in order to obtain proper extension. Adhesive straps are put on the diseased limb after the Taylor method, and the patient brought to the end of the table so that the pelvis is supported by a pelvic rest, and the feet attached to an extension apparatus by means of a cuff on the sound limb, and the adhesive straps on the diseased. Equal traction is now made on both legs, and when the desired amount has been attained, the plaster cast is applied, with the limb in a position of slight flexion, abduction, and outward rotation, as for the previous class, except that the cast extends to, or includes the foot, and fits closely around the perineum, which is protected against pressure by a heavy piece of piano felt. If the foot is included in the plaster the sole is reinforced, so as to allow walking and not break the bandage. If the foot is not incorporated, a Lorenz stilt, or a steel foot plate with two upright bars having joints at the ankle, may be attached to the cast so as to allow walking and prevent any possible jarring of the hip joint, the ends of the adhesive straps having been turned over the end of the cast, and made fast by a few turns of the bandage so as to prevent the limb from receding when the traction has been removed. When all muscular spasm and sensitiveness have disappeared, the cast may be cut off at the knee, and an ambulatory extension splint, with a steel foot plate and lateral uprights, with joints at the ankle and knee, attached to the cast above the knee, so that walking may be allowed without the foot coming in direct contact with the floor. If no symptoms of abscess appear, this cast should remain on as long as it serves its purpose, which may be from three to six months. A similar cast is then applied, and successive ones as they are needed until muscular spasm has totally disappeared, and passive motions of the limb cause absolutely no pain. This may last many months, but it is our only safe method of preventing disastrous results. When we

have succeeded in gaining a point where spasm and pain have been relieved, we may allow guarded motion with an apparatus which supports the pelvis, while at the same time it allows a certain amount of motion in the hip, knee and ankle. The most perfect apparatus that fulfills such conditions is one invented by Hessing, of Goggingen; it is so constructed that it fits the pelvis perfectly, and is held immovable by pubic, and perineal bands; to this the leg splint is attached so that extension may be maintained, and motion and walking allowed. It is impossible to give any definite time as to when the splint should be discarded, but experience has taught us that the guarded treatment should be continued for two, and possibly three years, after the spasm and sensitiveness have disappeared; because the patient has no pain is no sign that the disease is cured, it may be merely dormant, and an unguarded movement might set it up again, and cause undesirable results.

As has been mentioned, about 50% of the cases of coxitis develop an abscess sometime during the course of the disease, therefore in every case we must be on the constant lookout for abscess, so that we may recognize its presence as soon as possible. The simple fact that such a condition exists, does not necessarily mean that all hope of a good functional result is to be abandoned. So long as an abscess does not interfere with our protective treatment we may ignore its presence as far as treatment is concerned, but we must at the same time keep a watchful eye upon its behavior, so that we may deal with any changes that might occur. The surgical law that "when pus is found evacuate it" may be sound in all conditions except tubercular abscess of the hip, for it is a well known fact that if a tubercular abscess is opened by free incision, a sinus almost invariably follows, unless the diseased area of bone and soft parts has been totally removed; this sinus is a source of constant drain and annoyance to the patient, and it is only a short time after the operation before the whole tract becomes infected, allowing a good chance for a general infection of the patient. Many abscesses of this region appear and finally disappear by absorption without having given any trouble, the treatment of the joint having removed, or stopped the abscess-producing element.

If an abscess progresses to a point where something must be done to relieve the condition, we should endeavor to draw off the

fluid by aspiration; if the cavity refills and more trouble is caused, we should again aspirate, or even use a trochar should we find the fluid too thick or flaky to admit of its being drawn off through an aspirating needle. So long as the abscess contents remain purely tubercular, and are not infected by other germs, we should use the aspiration method, even if it requires two or more punctures weekly; for with this method, if it is done under strict asepsis, there is very little chance of infecting the cavity, or of producing a sinus, whereas with the free incision both are almost sure to follow. Is it not much better to do a simple puncture, often if necessary, and so relieve the condition, than to make a large incision and have a most troublesome sinus as a legacy? If the abscess has become infected, or has reached a stage causing constitutional symptoms, before we could begin treatment, then free incision, curetting the abscess wall with iodoform gauze, and closure by suture is indicated, but we must not think that we have completely cured the abscess, for unless the whole diseased area is cleaned away we are going to have trouble later on. It is almost impossible to get rid of all the diseased bone and soft parts, for the conditions existing in such a patient would render him unable to stand so prolonged an operation, and we will have a hard fight in trying to help nature to hold her own. The results in cases complicated with abscess are often fibrous or bony ankylosis, so that the leg should be fixed in the best position for walking with this end in view. Lorenz holds that in every case of coxitis it is decidedly better to try to get ankylosis than a movable joint, claiming that with a movable joint deformity is invariable; I can not agree with him, but am convinced that when we are so unfortunate as to have a large abscess as a complication, we can see an ankylosed joint as a result. Since an extensive abscess existed, there is necessarily a certain amount of necrotic bone left when the abscess is apparently cured, and if motion be allowed in the joint, there is every probability that the focus of tubercular infection will be set up again at some later date, therefore in these cases it is much better to give the patient an ankylosed joint, that will give him a most useful limb, instead of endeavoring to obtain motion that may cause most grave conditions when they are least expected.

The third class of cases come under the head of the treatment of the results of coxitis, rather than treatment of the disease itself, as in this class we have only the deformity to deal with. Generally they are cases that have never been treated, or that have stopped treatment before the process was completely cured.

On examination the leg is found to be in a position of abduction, flexion and inward rotation; there is considerable shortening, and the abductors and flexors are contracted, as is also the tendon Achilles, which holds the foot in an equinus position so that the patient walks on the toes. In such a condition our first object is to correct the deformity so that the patient may have the use of his limb. If there is merely fibrous ankylosis, it may be corrected by stretching the fibrous bands about the joint, and the contracted groups of muscles under an anesthetic, after which the limb is put up in a plaster spica from the umbilicus to the toes, in a position of slight abduction, flexion, and outward rotation, this position is maintained for six weeks or two months, when the cast is removed and massage begun. If there is true bony ankylosis it will be necessary to do an osteotomy of the femur to correct the deformity. An incision about one and a half inches long is made through the skin and muscle down to the bone a little below the great trochanter, an inch carpenter's chisel is then placed in the wound with its cutting edge at a right angle to the shaft of the femur. The femur is then chiseled through from below upwards and inwards, so that an oblique subtrochanteric osteotomy is produced. The deformity is then corrected, and two sutures placed in the skin incision, the wound being closed without drainage. A sterile dressing is applied, and the patient placed on a pelvic rest with the feet attached to an extension apparatus; extension is then made until the shortening is corrected as much as possible; this is accomplished by the divided surfaces of the femur sliding upon each other till the upper angle of the lower fragment is in opposition to the lower angle of the upper fragment. The limb is then placed in the same position as for the previous condition, and the plaster spica is applied. In some cases it is necessary to do a tenotomy of the contracted tendons, in which case the tenotomy is done after the osteotomy has been performed. The plaster spica remains on until thorough union between the fragments has taken place, when the

cast is removed, and a protective apparatus used in its place for some months, to prevent any injury to the atrophied limb. Generally one may obtain sufficient lengthening to correct any noticeable deformity, and when the patient has learned to make the sound hip joint do double work, the result is most satisfactory.

DISCUSSION.

DR. HATCH. I think that Dr. McIlhenny has covered the ground very well, but I believe that we see a class of cases which do not need to wear plaster or to be put to bed. I have two such cases now in young adults who were suffering from an old hip disease which was causing symptoms. In these cases I use what I call a convalescent splint, which is so arranged that the impact, in walking, is not transmitted to the hip, but by carrying the weight on peroneal straps and not letting the heel of the foot quite touch the heel of the shoe.

This allows the leg to be used and stimulates its growth.

DR. OECHSNER. It is to be regretted that the doctor did not touch upon the general or constitutional treatment, which is so important a consideration in this as in all other tuberculous infection. The open air treatment, the treatment by forced feeding is just as applicable in these tuberculous joint diseases as in any other. In looking to a local treatment we are most apt to overlook the importance of hygienic surroundings and forced feeding, regulated external, etc. The general practitioner should be able to carry out these measures thoroughly.

The matter of abscess is important. We should avoid, if possible, an incision into a cold abscess, as avenues for mixed infection are thus created, and the condition rendered much more obstinate. It is better to withdraw the pus by aspiration.

DR. MCILHENNY (closing). I wish to thank Dr. Oechsner for drawing attention to the constitutional treatment. I did not mention it because it is so self-evident that I did not consider it necessary to dwell upon it. However, I am very glad that the doctor should have mentioned it in his discussion.

Serums in the Diagnosis and Treatment of Tuberculosis.

By DR. WILLIAM E. EVANS, of Chicago.

I will occupy your time with a discussion of certain phases of the diagnosis and treatment of consumption. In failing to make mention of physical examination, of continued and close observation of temperature, pulse and other functions of microscopic examination of the system, I do not minimize the necessity of these in diagnosis. In discussing serum therapy in consumption, I trust that no one will conclude that I do not advocate fresh air and food. I am so anxious not to be misconstrued on these two points that I say say them now in the beginning, and shall repeat them occasionally in the body of my article.

Under diagnosis I shall discuss two methods, one of which, that of Arloing-Courmont, is a serum diagnosis; the other, the tuberculin test, is not technically such, though it is border line, and has some right to be so considered.

The Arloing-Courmont reaction is an agglutination test based on the same principle as that for typhoid, commonly known as the Widal reaction.

In the approximately ten years since this method was proposed, it has met with little or no favor, and is not now, and never will be, in general use. The reasons are these: 1st, It is too difficult of execution. 2nd, It is not sufficiently reliable. 1st, It is far from being the simple procedure that the Widal is. Some degree of uniformity is required in typhoid cultures that are used for Widal's test, and in warm weather and under various other conditions cultures go bad. But this difficulty is multiplied greatly with tubercular cultures. When the first reports began to come in adverse, Arloing-Courmont insisted that the principal reason lay in the use of improper cultures, and they insisted that use must be restricted to their homogeneous culture A.

2nd. The recent figures of Kinghorn and Twichell (*Am. Jnl. Med. Sc.*; Oct., 1906,) show the test to be thoroughly unreliable. In 247 cases they got the following figures: 70 healthy persons, 59 reacted positively 84.28 percent of 155 cases of tuberculosis 135 reacted positively 87.09 percent. Courmont obtained 26.80 percent of positive reactions in apparently healthy patients, and 12.10 per-

cent of failure to react in tubercular subjects. Kinghorn and Twichell say that the test in early diagnosis is of no value.

Tuberculin. The method which I have employed in using tuberculin for diagnostic purposes is as follows: The temperature and pulse are taken four times a day, at 8, 12, 4 and 8, for three days. Late in the evening (about 11 p. m.) of the third day 5 milligrams of old tuberculin is given hypodermically. The next morning at 7, the temperature and pulse are taken. This is done each 2 hours during the day, and up to late bed time. The dilution of the tuberculin is made by taking 1 cc of old tuberculin and adding it to 10 cc of 5 percent carbolic solution; 7 to 8 minims of this is equal to 5 milligrams.

Any one of three things can constitute a reaction, though the three things usually occur together. A rise of pulse of 15 beats is the most characteristic and reliable of the three. A feeling of malaise, increasing to violent headaches and, third, an increase in temperature to 101° or over. I name these in the order of their reliability in my judgment. The pulse I regard as a better index to tuberculosis than the temperature, not only in connection with diagnostic tuberculin, but in the entire clinical course of the disease. Take a city patient and put him in the open air and his temperature usually falls to the normal in a few days, but months are required to bring the pulse down.

These are the usual procedures. From them there must be variation from time to time. Some of these, in my experience, have been as follows:

1st. The object in the preliminary observation is to establish to your satisfaction the range of temperature, pulse and general condition in that patient. If your patient has a rapid pulse or a temperature elevation, it may be necessary to prolong the preliminary observation much beyond three days. Do not terminate this period until you have so judged your case that you can interpret the results of the injection. In case of fever and rapid pulse, the use of tuberculin is not precluded in all cases. A longer and more careful preliminary period is required.

Occasionally it happens that a well-nourished, well-feeling man comes into your office for diagnosis. * You cannot hold him for preliminary observation. His temperature and pulse are not much off.

Give him tuberculin. If there is no reaction there is no tuberculosis. If there is reaction he will always submit to subsequent observation, or even to reinjection, if required.

The dose must be varied occasionally. I want to emphatically state my belief in one clear-cut dose and my disbelief in the use of gradually ascending doses. Uncertainty is eliminated by giving a dose that will result in an unpleasant but certain reaction. Francine says that the custom at the Phipps Institute is to give an initial dose of 1 milligram. If this is negative, 3 milligrams are given. If this is negative 5 are used. This method is in somewhat general use. Its advantage is that you may escape giving your patient a rather uncomfortable twelve hours. Its disadvantage is that you not infrequently get a greatly modified reaction, which you are at a loss to interpret. A while ago a very distinguished medical man in Chicago took tuberculin after this plan. His chart was variously interpreted by different medical men; not until Trudeau pronounced the reaction positive was there peace amongst the warring elements.

A few years ago the farmers who were anticipating a visit from the tuberculosis inspector injected their animals with tuberculin and thus secured an immunity which lasted past the visit of the inspector.

At the Pottenger Sanitarium they use small doses and watch their patients very closely next day. They are thus able to detect tuberculosis, with a small dose. For my part, I prefer to use a good sized dose and keep my patient comfortable with baths and phenacetin.

The Pottenger method is especially applicable to tuberculosis with lesions in the larynx or otherwise in sight. They watch the vascular changes in the periphery of the lesion. My limited observation is (Gamble & Brown, *Jnl. Am. A.*, Oct. 14, 1905, and Wilder, Chicago Ophthalmologic Society, 1906) that these cases are best handled by giving 4 milligrams of new tuberculin. Old tuberculin produces a constitutional reaction; new tuberculin produces a local reaction without much constitutional disturbance.

The arguments in favor of the use of tuberculin are, 1st, that it is safe. 2nd, that it is accurate.

1st. When Koch announced tuberculin, Virchow opposed it

saying that it would break down the peripheral wall of the tubercle and thus cause dissemination of the bacilli. I think this theory has been supplanted at the present time by the idea that a diagnostic dose of tuberculin will lower the opsonic index to such a point as will foster spreading of the infection. Tuberculin being on a plane with physical effort, tire, hunger, etc.

The old Virchow idea was chiefly sustained (aside from the personal equation of its advocate) by an occasional experience in which generalization of the tuberculin process followed the use of tuberculin. Against it are such facts as these: (a) The observations of Long, Cope, Whipple and others on dissemination of tubercle bacilli through the thoracic duct.

(b) The numerous clinical observations of men who have studied the development of miliary tuberculosis in the course of localized tuberculosis.

(c) Studies of the histology of the nodules, especially in relation to blood and lymph vessels by Zeigler, Benda, Wergert and others. (Walsham, etc.)

(d) The study of the lesions of experimental eye tuberculosis when tuberculin was used by Trudeau. (*J. M. R.*, 1905.)

(e) The experience of Pearson in bovine tuberculosis (1,000,000 experiments) or of Salmon, in his comprehensive study.

(f) The experiences of Trudeau, Osler, Tinker, Pottenger, Baer and others too numerous to mention.

As to the opsonic objection—that is that the opsonic index would be dangerously lowered, it is offered by Sahli and by others, but no one would claim that it was established at the present time.

As to its accuracy—Voge's statistics for animals showed 2.8 per cent of error. This is higher than the average error percentage for stock. In the human subject our dummy experiences (Wood, *Jnl. A. M. A.*) shows 6 per cent of error, 2 per cent in people who had tuberculosis (late cases) as shown by autopsy and in which reaction was not given, and 4 percent represented by hysterics and syphilitics who reacted, but in whom tuberculosis was not found by other methods of diagnosis within a few months of the test. There is the possibility that each of these had a latent tuberculosis. France (British Congress, 1901) pronounced it pathognomonic. Madison (*Am. Med.* Dec. 20 '02) found the margin of error 10 percent.

This is the highest percentage of error that I have encountered in the literature. The usual figures run from zero up to about 6 percent. This is exceedingly low for any medical procedure, in fact, for any human procedure.

Now, gentlemen, to what I am about to say I ask your attention and careful thought. Early consumption is a curable disease. Late consumption in most climates is an almost uniformly fatal disease. The average diagnosis of consumption is tantamount to a death sentence. The average diagnosis is not made until the disease is hopeless. With tuberculin the man moderately expert can discover the disease when it is curable. Hundreds thus die uselessly in Louisiana each year. Against this, which is a condition, can one argue the theory of Virchow, now disproven, that the peripheral wall may be broken down, or that of Sahli, that the opsonic index may be lowered or the finding of a few viable, but feeble glycerin soaked bacilli in tuberculin, or the single coincidence of Knopf. Trudeau tells us of having engaged to use tuberculin on a certain patient on a certain day. Prior thereto the disease became generalized. Had he used it a day or two earlier, he probably would have thought himself responsible for the generalization.

Just a word as to the diagnostic value of the opsonic index.

It has been proposed that great daily variation in the opsonic index as regards tubercle bacilli is a diagnostic sign of tuberculosis; also that the typical reaction, after the use of tuberculin, is a diagnostic sign. I am not prepared to give an opinion on these procedures, except as to their technical limitations.

THERAPEUTICALLY: Again let me say that serum therapy in tuberculosis finds no place apart from hygienic treatment, air, food and control. But Trudeau's experience has been that if two groups of patients be given exactly the same hygienic opportunities, one-half with tuberculin, the other without, the half having tuberculin will do about 25 percent better than the other half.

The method of which I shall now speak is not my method. It is the method with which we have had experience.

Method. The diagnosis having been made by physical examination, close observation of the patient and by tuberculin, the patient is given a week or ten days to allow his resistance to rise, after which he is injected twice a week with new tuberculin. Tuber-

culin containing extracts of the bacilli and their suspended bodies. We begin with $2\frac{1}{2}$ minims of what we designate as No. 1. To make No. 1 we take .1cc of the liquor and add 10cc of carbolic water, 5 percent. This is the mother liquor. Of this .1cc is diluted with 100 cc. carbolic water. This is a dilution of 1 to 100,000. The original tuberculin used contained one milligram of bacilli to each cc. of the fluid called tuberculin. Therefore, when one dose reaches 15 minims we are still giving as little as 1/100,000 of a milligram of bacterial body. My reasons for this small initial dosage are these:

1st. Bacterial body is not a comprehensive measure of the tuberculin strength, as the fluid contains potent extractives.

2nd. Generalized use of tuberculin must be limited to the few to whom opsonic control is possible. In its absence so large a dose as 1/1000 of a milligram is dangerous, so far as we can judge now. Injections are given twice a week. The initial dose is $2\frac{1}{2}$ minims. This is increased $2\frac{1}{2}$ minims every dose until 25 minims is given. Time required five to six weeks. After this comes No. 2, .1cc mother liquor, in 10 cc. of water. Begin with $2\frac{1}{2}$ minims, increasing $2\frac{1}{2}$ minims at each dose, injecting twice a week. Time required, five to six weeks.

Then No. 3, 1 cc., mother liquor, in 10 cc. of water; same dosage; same interval; same time.

No. 4, mother liquor (the usual diagnostic dilution); same dosage; interval between doses, increased to one week. Time required three months. After the 25 minim dose of No. 4 is used, pass to No. 5, 1 cc. of tuberculin in 10 cc. of water. Inject once a week or later, once in two weeks. Begin with $2\frac{1}{2}$ minims and increase at the same rate.

The time required for the entire series is 9 to 12 months.

This is the routine. Here, too, there must be variation. A few weeks ago the postmaster of El Paso told me that for one year no train had come into his town on time. The same is true of our patients. It has been our custom, if the pulse was rapid, the patient was feeling badly from any cause, to omit the hypodermics or else not to increase the dose for the time being.

Some of the further variations in the methods which we have employed are as follows:

1st. The Wright opsonic index method. Weekly injection of 1/1000 milligram controlled by estimation of the opsonic index, the cases having undergone preliminary opsonic investigation. The young men engaged in this work have had a very limited experience and I do not feel that we are entitled to any opinion as to its value. Dr. Bass will tell you much more of this phase of the question than I can. Of this I am certain that, until the technic is perfected, it will not be available for many workers. And in my opinion, as you readily see, we are not justified in withholding the use of serum until this technic can be perfected.

2nd. The use of old tuberculin, I have used old tuberculin by the same method as that described for new tuberculin, except that the strength of No. 1 old tuberculin is the same as that of No. 2 new tuberculin and the same relation is maintained in the other numbers. Sahli says that it does not matter much what tuberculin you use. The method is of more consequence, he thinks. The method which we use is nearly that of Dengsz, of which that of Sahli is a modification; it is nearly that of Trudeau.

3rd. Our patients at Dunning are all old, septic paupers. And it has seemed to me that the way to treat them was to treat their sepsis and then try to do something for their tuberculosis. Most of the consumptives in the country are septics; at least the sepsis picture overshadows that of tuberculosis. Open air is a sepsis treatment. The moderately septic consumptive put in the open air speedily loses his fever; stops sweating; his sepsis improves; his pulse continues rapid, indicating a continuance of tubercular intoxication. The febrile consumption sent to live in the open air of the arid west loses his temperature, sweats, and his tuberculosis is healed or evolves slowly, tending frequently never to heal, and never to kill.

If this argument is good then open air should be good for all kinds of sepsis.

Returning now to my main theme, if we could help the sepsis the tuberculosis would be helped also both directly and indirectly. We are making 24 to 48 hour incubator cultures from the sputum, killing these with heat and injecting a suspension of the killed bacilli. This is done once a week. It is perfectly controlled by opsonic index. No attempt is made to plate out the bacteria and

prove which is harmful. May be some harmless ones may be harmful in that environment, and that in that association. The reason for growing a short while in the incubator is that we get a poor growth of saprophytes and a relatively good growth of pathogens by this method. We inject whatever grows, on the idea that that's what is ailing him. We count the leucocytic content without regard to kind.

Ravenel and Irwin, examining sputum from 22 clinic cases, found strepto-cocci in 22; staphylococcus, a and a, 20; coli 4; diphtheria, 2; subtilis 3; pneumococcus 9; sarcin, 17; yeasts 5; cladothrix 2; others 9.

The same men examined 36 cavities, finding 3 sterile. In 33 they found streptococcus, 23; staphylococcus, a and a, 30; pneumococcus, 4; coli, 20; diph., 5; yeasts, 9; sarcina, 4; others 10.

Klebs and Klebs say that the mixed bacteria of the sputum do not give us much light clinically. This is the general opinion. For the present, at least, we would seem justified in using the bacteria as we find them—properly used. That is either with opsonic observation or else with a very small initial dosage.

Our work has not succeeded very well; our force is very small; our patients are very unsatisfactory; some have died, some have improved and promptly left us; some are still under observation. Up to now it is scarcely worth the dignity of mentioning.

The specific sera that have been used for mixed infections have usually been directed against the streptococcus. Bouney reports that about one case out of four will show a rapid reduction in temperature. He gives 4 to 5 doses at intervals of one or two days, 10 to 20 cc. is the dose. In addition he sometimes gives 10 or 12 doses by the rectum. A doctor from Phenix has had equally good results.

Pottenger and Browning report good results in 17 out of 20 cases in which streptococci were found in the sputum. Their initial dose was 20 cc. followed by doses of 10 cc. In some cases they gave 10 to 20 cc. by the bowel.

Streptococci antisubstances are quite uneven in their action. Three times I have seen the temperature come to normal and the symptoms drop in 48 hours. Much more frequently I have seen no effect. Ravenel has said that the streptococci of sputum are

much less virulent than those from which anti-streptococci are made. My experience in making Coley's serum is that a most virulent streptococcus will usually become innocuous in the first generation. I understand that the streptolytic serum is polyvalent and is obtained from old diphtheria antitoxin horses. It seems to me that when anti-streptococci sera will do good their effect is magical, that usually they do no good and that there is no way of telling which cases will be amenable to it.

4th. The use of other sera, such as that of Maragliano, Marmorek, von Ruck, Klebs, von Behring, Sahli, Barbuck, Paquin, de Schweinitz, of which there are legion now, with these I have had no experience. Ravenel and Pearson were somewhat impressed by the two former. Says Pearson, of Maragliano's serum, "From the laboratory standpoint it seems that his claims can not be successfully contested." The curative value of his serum is not so well established.

5th. **ANTAGONISM BETWEEN BACTERIA.**—Pasteur, Cantani and Petrushky were the first to make use of this principle in practical bacteriology. Probably the only use of it that has originated in this country is the Coley erysipelas treatment of malignant growths.

Wernick treats tuberculosis with an albumoid metabolic process of a bacillus probably a saprophyte. Walsh uses a saprophyte for the same purpose. Baldwin was not able to verify Walsh's results.

With this phase of the subject, I have had no experience except in a moderate use of yeast.

6th. With the methods of administering sera other than hypodermically, I have had no experience. Hodenpyl demonstrated that the clinical course of tuberculosis was largely influenced by the method of intaking of the bacteria. Such is the teaching of Harbitz, von Behring and others. Some of this difference is due to the difference in dosage, but much of it is due to the degree of resistance which the route of ingress offers. This true of bacteria is probably still more true of bacterial products. Yet, in the literature we find occasional references such as the following. Wernick uses his powder by the mouth; yeast is given by the mouth. Bosanquet and French gave Marmorek's serum successfully by the rectum; von Behring has made use of milk. The use of meat from tubercular animals has been advocated.

With none of these procedures have I had any experience except with yeast.

7th. Should tuberculin be given to a patient who is distinctly tuberculous? I do not feel disposed to do so for the present at least. The literature is beginning to show a good many reports from men who are using it in such cases. The way that I feel about it is this: Those of us who have not adequate laboratory facilities must judge of our course by fever, pulse, malaise, etc. I am aware that weight has shown that in tuberculosis there is not close relation between fever, malaise and opsonic index. Yet clinically, we have found that in some way or other there is relation between pulse, fever, malaise and the well-being of the patient. In febrile tuberculosis I would be at a loss to gauge the administration. I hope that the sanitarium men who have their cases under superior control and direction will decide whether you and I can use it in febrile cases, and if so, how we are to gauge its use. In the meanwhile, I think we had better leave it to them.

Having discussed the variation in the methods of serum therapy, both in the agent employed and the way of employing them, and especially the only one with which I have any experience of consequence, we will next discuss the advantages of serum therapy and then its place in the treatment of consumption. The method of combat of the body against tuberculosis is not fully settled. The histology of the tubercle itself has been reopened. It may be as Miller claims, that many of the cells of the tubercle are leucocyte derivatives. It may be that Holmes and Arneth are right in demonstrating changes in the circulating leucocytes. In any corut the protective changes in whatever cells located are antagonized forces engendered by the tubercle bacillus its toxin or the two combined. The laws of antagonisms must prevail. When the technic is perfected somebody will produce an anti-bacterial body, a sensitizing body, an anti-toxin or some other form of antibody. But let us not forget that the great problem is the late case—the lung softening case—the septic case. Anti-bodies must be found for these. Anybody can cure the early cases anywhere, diagnosis and control. But these late cases must be studied. Sera must be found for these.

The place of serum in therapy is best expressed by Trudeau. It is an adjuvant of open air, food and control. To these it adds 25

percent of efficiency; alone it will probably disappoint—quoting Trudeau. I quite agree with Dengsz that the principal fault in treatment—faults which may lead to failure and even seriously endanger the patient's chance of recovery are:

Beginning the treatment with too large amounts. Raising the dose too rapidly or at too short intervals. Injecting again before all effects of a reaction, both constitutional and local, have passed away. Increasing a dose after a reaction has occurred. Neglecting to consider malaise, loss of appetite and increased cough as evidence that the limit of the patient's tolerance has been reached, and calls for an interval of rest and the reduction of the dose. Also that the physician who disregards, as of no importance, an increase of a minute fraction of a milligram of tuberculin or a rise of a few tenths of a degree of temperature will meet with disappointment in the application of the tuberculin treatment. I have become convinced that any danger there may be of aggravating the patient's condition by tuberculin treatment lies principally, if not wholly, in its faulty or reckless administration.

Gentlemen, I do not pose as a consumption expert. My experience has been very limited. But these two things I know:

1st. A great many lives are lost because physicians are not making early tuberculin diagnosis.

2nd. Specific consumption therapy as an aid to fresh air, food and control, is worthy of your study.

Orleans Parish Medical Society Proceedings.

President, DR. AMÉDÉE GRANGER. *Secretary*, DR. E. M. HUMMEL.
141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. E. M. HUMMEL, Chairman.
DR. HOMER DUPUY and DR. S. K. SIMON.

DR. JNO. J. ARCHINARD presented his

Address of Retiring President.

GENTLEMEN:

Custom requires an annual report from each retiring officer; to this the President forms no exception to the rule.

Such reports are usually a review of the work done or good

accomplished by the various departments or the administration as a whole. Heretofore with no spirit of self-laudation, but with a commendable pride in work accomplished or successes achieved for the benefit of the Society, each retiring president enumerated all benefits accruing to the Society during his tenure of office.

When I reflect upon the record accomplished during my administration, I would, indeed, be unfair not only to my associates, but to myself, if I did not particularly direct your attention thereto. seriatim:

I. As regards membership:		
On rolls January 1, 1907.....	261	
Elected during 1907	47	
		<hr/>
Total membership, 1907.....	308	
Loss in Membership.		
Resigned	5	
Dropped	9	
Died (Formento)	1	
Declined membership	1	16
		<hr/>
On rolls December 31, 1907.....	292	
On rolls December 31, 1906.....	261	
		<hr/>
Gain in 1907	31	

Nineteen hundred and seven had the largest gain in the history of the Society. The gains in membership for the past five years were as follows:

Total membership 190,	1902	gain in membership	12	(Gessner.)
"	"	210, 1903	" "	" 20 (Graner.)
"	"	226, 1904	" "	" 16 (Magruder.)
"	"	237, 1905	" "	" 11 (Le Beuf.)
"	"	261, 1906	" "	" 24 (Miller.)
1907. Active, 278. Honorary, 12. 292.				

II. As regards Scientific Papers read:

Papers read.	Cases reported.
1906, 33	6
1907, 39	5

III. As regards circulating library: The establishment thereof has been of much benefit to the members as evidenced by their patronage and expressions of approbation.

IV. As regards stenographic reports of discussions:

This was an experiment, but was discontinued on account of inability to get stenographers for the fee fixed competent to report technical matters. This should not discourage the Society when financially able to reinaugurate the system as the work done along these lines already proved beyond a doubt the treachery of human memory.

V. As regards liberal entertainments: "Eaten bread is soon forgotten" is an old adage, but none here present to-night who have been fortunate enough to be present at our social sessions during the year, in attendance at the State banquet last May, or the smoker given the Southern Surgical & Gynecological Association recently, will deny that they far excelled anything heretofore attempted.

In my inaugural address, I inveighed against cliques or combines that jeopardized the integrity and welfare of our Society, in order to promote selfish ends, further private interests, satisfy bounding ambitions, or wreak vengeance for being outstripped in honorable competitions for control of the affairs of our organization, and I deem it proper at the closing of my tenure of office to again raise my voice, in no uncertain tones, against this menace.

With nearly every eligible and reputable practitioner of medicine in New Orleans within our ranks, with a library of medical works of reference unsurpassed by any medical Society in our Southland, with feasts of reason, scientific knowledge and research served to all members on every second Saturday of the month, and a social session every fourth, whereat the good things of life, for physical man, is dispensed with a lavish hand, each and every member is urgently requested to be present in order to meet his confreres, cast aside professional cares, laugh, make merry and make of each other the boon companion of their social hours, harmonizing differences of opinion, cementing friendship and presenting to the general public who are too prone to note our disagreements an organized and harmonious Society of professional gentlemen whose power and influence is second to none, and should be first of all.

Believe me, gentlemen, I can truthfully say of our Society, equipped as it is, as Macaulay did of America: "If she be destroyed it will not be by any power without, it will be by the Huns within."

In bidding you farewell I reluctantly lay aside the work of President that has engrossed my attention for the last year and to which I have devoted my best energies, time and devotion, and in the pursuit of which I have found hundreds of pleasant days, many happy associations and numberless friends whose value can only be measured in that coin that rings with the music of dear companionship, when the uncovered heart speaks forth its simple truth.

Believe me, gentlemen, no historic college walls could furnish grander environments, no Alma Mater sweeter memories than the Orleans Parish Medical Society has during the time I presided over its destinies and did everything in my power to promote its welfare.

DR. AMÉDÉE GRANGER, incoming President, delivered the following:

Address of Incoming President.

Fellow Members: I thank you for the honor you have conferred upon me by electing me to the highest office within your gift, and I assure you that the proudest and happiest moment of my life was on Saturday night, December 14, when, by your vote, you gave me that substantial proof of your continued esteem and confidence.

A long and well established custom makes it incumbent upon me to mention to-night some of the more important matters which this administration will have to consider for the greatest good of the Society and to ask your support and co-operation, ever bearing in mind the fact that you are the Society and that everyone of you should feel a deep interest in its welfare and advancement, that I am only your presiding officer during your deliberations, and your representative at all times, and that I can accomplish nothing without the full co-operation of the Society.

I trust, therefore, that not only the members of the Board of Directors and of the various committees appointed to-night will give me their hearty support, but that every member of this body will assist in an effort to obliterate any factional lines which in the

past may have disturbed our otherwise harmonious and fraternal relations, thereby making sincere and strong the bond of union and interest which unites us in our devotion to a common cause; the advancement of medical science and the welding together of the medical profession in a great brotherhood on a plane as elevated as the healing art is unselfish. With such singleness of purpose among us, if our scientific program is made interesting and valuable by the importance and opportunities of the subjects for discussion, I am certain that the few eligibles who are not members will, realizing their loss, soon join our ranks.

Do not wait for the Committee on Scientific Essays to call on you for a paper. Do not hesitate to present or secure scientific contributions, but consider yourself a Committee on the Whole on Scientific Work, and look upon the Committee on Scientific Essays named to-night as your chairmen and secretaries for the purpose of better assisting you in this work.

Further, following in the footsteps of the older medical societies of Europe, consider it your duty to announce to the medical world any new knowledge, whether acquired at the bedside, in the operating room or in your laboratory, through this Society, by first presenting the case or report or new device to this body. In this connection, I am fully aware that original papers read before this Society, after publication in our official organ, are not accepted by other medical journals in which the contributors may wish them to appear, although in the *NEW ORLEANS MEDICAL & SURGICAL JOURNAL* they are not printed as original articles and are thereby deprived of the benefit of being abstracted by other medical journals. This has been a serious drawback in the past, and has caused the Society to lose some very valuable original contributions. I would suggest that this matter could possibly be solved by delaying the publication of papers in the official organ as part of the Society's scientific proceedings for a limited time, within which they could appear in some other journal, at the option of the contributors and the discretion of the Publication Committee. Again, if acceptable to the *NEW ORLEANS MEDICAL & SURGICAL JOURNAL*, and agreeable to the essayist, they could appear as original articles in that journal, provided arrangements be made for their publication in the bound volume of the Society's Transactions.

I urge the Committees on Publication and Scientific Essays to give this matter their early and careful consideration.

We expect to continue the quarterly social meetings and I hope that we shall see to it that they are better attended. The object is certainly not merely to partake of the simple refreshments which our modest means afford, but to have a chance of meeting and becoming better acquainted and to discuss informally subjects of interests to the welfare of the Society. I know of no better way to cultivate that feeling of good fellowship so essential to our success as an organization and to secure which I earnestly beg your co-operation. If in the past these meetings have not accomplished all that was expected of them, it was largely due to the fact that too many of them neglected to come because there was no scientific program. This is a mistake, and we should deem it our duty to attend these social meetings. It is true that we are primarily a scientific and literary society, but we must also remember that as the representative body of the medical profession of this city and an important unit in the organization of the A. M. A., it is our duty to also safeguard the interest and the standing of the medical profession of the city and State, and to show the public every evidence of numerical and social strength.

Another subject of vast importance which is likely to come up for consideration during this year, is the fact that our library has outgrown our shelving capacity, and that our membership has exceeded the seating capacity of our Assembly Room. Besides, our domicile is a regular firetrap, and although we carry sufficient insurance on both the building and the books, in case of a fire, the library would be entirely destroyed, which means that hundreds of old and valuable works and the early numbers of some of our best medical journals which our Librarian has succeeded in obtaining at a great cost of time, labor and money, could never be replaced at any time. It means, therefore, that the most important part of our reference library would be lost forever.

Again, I thank you, and I promise that you will always find me to be the president of the entire Society, whose members I desire to count, one and all, as my friends and the friends of an administration which is pledged to consider only the greatest good of this Society and the advancement of the high objects for which it is organized.

HON. SIDNEY STORY, Annual Orator for 1908, delivered the following:

Address of Annual Orator.

Mr. President and Gentlemen of the Orleans Parish Medical Society: In acknowledging the honor which makes me the orator, on this occasion, I crave your indulgence from the start as I am sure I cannot possibly measure up to your anticipations, after the long line of brilliant and eloquent men who have addressed you at your annual gatherings.

I have been considerably non-plussed in selecting a subject I might be fairly competent to handle, and which would prove of interest to you. My theme therefore is one of generalities. I shall attempt, however, to emphasize one or two ideas that will not only appeal to you, but on which you are most competent to offer suggestions, give advice; let alone lend your great influence towards solving.

I am not an expert upon the subject of Sanitation or of Sanitary subjects. I belong to that great mass of people who take life which you and your work give them. My fortune, therefore, in speaking to you is a great one; yours in listening to me, will, I fear, be a small one.

There is nothing under the sun that does not need the application of your splendid principles to its best growth and its flowering culmination.

The world has the greatest regard for the physician. As a general rule, he is learned, self-sacrificing and disinterested. I know of no calling in life that commands more our respect and admiration.

What would the world be without the medical scientist, who, with ambition born of love and perseverance, delves into the secrets of Nature with the object not of selfish gain, but to better humanity.

We should strive by all possible means to protect this noble calling by legislation from malpractice, and from charlatans who bring the profession into disrepute, in the eyes of the masses and the ignorant.

I am an ardent advocate of laws that will measure out the fullest meed of protection to that class of men, whose lives are consecrated

to the alleviation of human ills and to the mastery of those problems of nature and science that tend to the protection of life, the increase of happiness and the betterment of society.

The physician is the High Priest of Sanitation and his disinterested and unselfish motives can find no greater field for good than when enlisted in solving the great sanitary problems of his city and State. His influence for good and for the betterment of our conditions, are more far reaching than that of any class of men I know of.

This is practically the age of reform in all matters; social, political, and sanitary. All the reform movements begin slowly, but gather momentum as they advance. And when a thorough comprehension has permeated an enlightened public of the end and aim had in view, the effort assumes overwhelming proportions and opposition is swept away like straws by the breath of the hurricane. The sure test of enlightenment is the rapidity with which any reform advocated and the thoroughness of the corrective measures employed, to do away with the evil.

New Orleans has recently been profoundly and rightfully agitated over several sanitary reforms, chief among them, the all-important question of a pure milk supply. The battle was a long drawn and stubborn fight, for the reason that ignorance and an utter disregard for human life oposed it. What measure of success has been attained we are familiar with, and in paying a just tribute of praise to the public servants who have so perseveringly fought for the people and humanity, we must extend to them encouragement in the hopes that the triumph will be complete.

It has proven a great educational campaign that will end in changes most beneficial to the health of the community, and which requires no prophetic eye, to state, will result by driving the dairies out of the municipal limits, into the country, in a lucrative industry, that of scientific dairying, which will develop into great proportions, and will retain at home the millions now spent abroad for dairy produce.

The grave and distinct problems that the new era of town life brings with it, are of universal and simultaneous moment. The essential questions pertaining to administration and to social and economic management affect all cities alike. In truth, the same

economic and industrial causes have operated everywhere to produce the same result. A rapid influx of the rural populations into adjoining cities has forced upon the economic mind of the age the necessity for a prompt solution of the great problem of how to minimize the evils and how to maximize the advantages of urban life under conditions of dense inhabitancy.

But a few years ago, owing to our topography and general conditions, it was considered practically impossible to provide our city with an efficient and satisfactory system of drainage and sewerage. But modern engineering and sanitary science have made it practicable and feasible. And at this moment I desire to state that my opinion has always been that it was a great mistake not to have selected a physician or a medical scientist as one of the members of the Water and Sewerage Board. Here are two great public necessities upon which depends to a great extent, the health of the community and the construction and operation of which call for men who are versed not only in matters of finance, law and engineering, but in sanitary science. These two great systems are practically under way, and will be in complete operation, we are told, within another year. It is unfortunate for us that the construction of our public works should drag as they do. With a soil and topography such as ours, with the money in hand, there is no excuse for our not constructing a sewerage and water works system in half the time it has taken us. Our people voted the tax in 1899, and it has taken eight years to accomplish what we have, and it will be probably another year or two before the two systems are thoroughly completed and in operation. It might appropriately be stated that some of our quasi political boards and politics generally need sanitation in a most concentrated form.

When we inaugurated our sanitary campaign in 1899 for sewerage and pure water, New York had not begun the construction of her great subway. That gigantic piece of engineering was constructed through rock, under sky scrapers, at the cost of millions in less than four years. In that time the waters of Lake Michigan were united to those of the Mississippi, another costly, necessary and monumental work. When we organized our sewerage board and sold our bonds, the Panama Canal project was in embryo. The United States purchased the enterprise, organized the commission,

has expended already one hundred millions in excavations, and if we don't hurry up our work, the big ditch will be turned over to the world's commerce before our water and sewerage system is completed.

One matter it might be well to consider in the construction of this sewerage and water system, and which emphasizes all the more the importance for a reorganization of the Board, so as to have as one of its members a thorough sanitarian, who would be thoroughly appreciative of the necessity for scientific plumbing. If I am not mistaken, since the introduction of the patent flush closets in our city, typhoid has increased with us. Unless we are most careful in seeing to the enforcement of the law and specifications, that are required under the ordinance in the matter of plumbing, etc., there is a great danger of a cheap lot of work and defective plumbing, from which other cities have suffered, being run in on our people, the evil effects of which will be felt at some future date, when we become justly alarmed over the ravages of some distant typhoid epidemic. Now is the time to see to it, and the men of science and sanitation who appreciate the importance of these things more than the average layman, should as patriotic citizens, desiring at all times the well-being of the people, take the initiative and see to it that this system of sewerage now being laid and about to be connected up with over 60 thousand dwellings, should be the best from the standpoint of sanitary science. It will prove a great boon to our people. These great systems of sanitation once in operation, our city will, in a few years, be foremost as to her advantages as a resident city, and will steadily as the improvements progress and are completed, reduce the death rate, until she sustains the distinction of recording the lowest rate of any city on the globe.

Modern enlightenment does not admit of self-respecting communities, continuing in the defective ruts of past periods, ignorant of the great issues of wholesome living and salubrious surroundings and toleration of conditions, declared by science to be injurious to health and longevity. It is only the ignorant, those who have not kept pace with the splendid advance of civilization, along lines on municipal improvement of recent years, unaware of the successful achievements of science in those directions, who hesitate to accept boldly modern ideas and modern execution, for the fallacious

reason that the expenditure of the millions required for the execution of such work, will prove a burden on the population. The experiment has been tried, and the results obtained are an overwhelming confirmation of the theory that millions are well and sagaciously spent, when applied to the sanitation, the improvement and the beautification of a city.

“Many things impossible to thought,
Have been by desperate need to full perfection brought.
The daring of the soul proceeds from themes;
Great enterprises and active diligence.”—Dryden.

There is another subject, I believe, which now deserves the thoughtful consideration of our city, and which no class of citizens are more admirably fitted to discuss and to solve than the gentlemen of the medical profession.

A few years ago I had the honor of representing a district of this city in the municipal assembly. I introduced a measure at that time, which, under the pressure of public sentiment, I withdrew, realizing that the public mind had not sufficient knowledge on the subject, and yet maintaining as I do now, that the time is not far distant when the idea will again come to the front and the problem of necessity solved. I refer to the closing up of the cemeteries located in the heart of populous centers and the removal of them to the outskirts, or beyond the limits of the municipal corporation. There was a howl of protest and indignation, but it will come surely as it came before, when the cemetery of our ancient city was, by proclamation in 1788, of Don Casa Calvo, Spanish governor of the province, removed from the corner of Conti and Royal (where the old conveyance office now stands) to beyond the Ramparts of the city, which section is now known as the “Tenderloin District.” I had suggested a plan for the expropriation of certain tracts of land in the rear of the city, between the Ridge and the Lake, so as to convert same into a beautiful cemetery such as Metairie. Then to order closed all the old cemeteries or prohibit burial therein after 10 to 15 years from the passage of the ordinance.

Superstition and misplaced sentiment had much to do with defeating the measure, which sooner or later must be solved in this fashion at a greater expense, of course, as the years run on. The condition of all these cemeteries is a matter of public knowledge, and no class of citizens understand and appreciate more the cor-

rectness of my statements than the medical men. It is not necessary to describe them all. Take for instance, the Old St. Louis Cemetery. There lie the ashes of those who, in their lifetime, were the leaders in all that made the Pelican State famous.

There repose the remains of the French Chevalier, the Spanish Don, the men who, in their time, were among their fellows, "*Sans peur and sans reproche*," who founded this State, illuminated its literature and history, and who went down to the grave full of honors and age. During their lives they occupied positions of honor and dignity in the community, and some of them, we have been unable to replace in all that the term dignified patriotism implies.

Yet the remains of this once proud race repose in the heart of this metropolitan city, under surroundings that would not be tolerated in any other community, and amidst a scene of decay and wretchedness that could not be duplicated in a "potter's field" in a European country. If a man doubts this statement, let him see for himself. The burial ground referred to is open every day of the week, and he who wishes can have visual evidence of the truth of the description. On all sides are tottering tombs, festering heaps of rubbish, rank growth of weeds, and filthy, foul-smelling pools of water. Talk about yawning sepulchres. Why, there are any number of these to be seen for the trouble of going to the cemetery. These are not yawning sepulchres in theory, but in truth, and in fact, God knows where the remains of the departed have gone to, perhaps to their original dust, and are scattered to the winds of heaven. And what a situation for the location of a cemetery. On the one side the noise of the saw mill and the roar of the factory, and on the other side, the profligate debauchery of houses of prostitution. Think of it, ye descendants of the dead who repose in this insanitary necropolis. Your venerated dead lie surrounded with filth and slime, and rotting weeds, such as you would not permit to be in evidence in your barnyards.

Shall we continue to permit these conditions to prevail, and let the fair name of our city be charged with doing so shameful a neglect to its dead? Whilst all the burial places in New Orleans may not be as bad as the old St. Louis necropolis, yet there is not a single extenuating circumstance to be alleged in favor of their maintenance within thickly populated centers.

Having therefore laid the foundation for a drainage system, that lowers our water level, practically raising the city from 5 to 6 feet and for a scientific sewerage system, which will remove 60 thousand cesspools that for a century or more have poisoned the soil we tread upon and the air we breathe, and having provided for a water supply, pure and abundant, our having realized the necessity for adopting a scientific and business-like system of street cleaning and garbage removal, let us not overlook one of the most essential reforms, from a purely sanitary and health standpoint, not speaking of the sentiments that should rouse our every energy, the improvement of our burial grounds. Let the cemeteries in the heart of inhabited sections be closed, and give the people 10 to 15 years in which to provide for other burial places. Place the burial ground beyond the corporation limits if necessary, far from the habitation of men, the mart of trade, and the din and conflict of the world, where, amid Nature's peaceful surroundings, under the shade of the trees, the beloved dead can sleep in silence. The municipality should expropriate the land and pay for the cost of removing the tombs. Give to each tomb-owner a lot in one of the beautiful new cemeteries, that would be laid out with care and beauty, for his or her lot in the old cemetery. Once all the tombs or graves have been removed, convert the old cemeteries into public squares, adding that many more lungs to the city and offering a place in crowded centers for the population to gather in midday or in the evenings for rest and recreation.

Speaking of squares or public parks, they are not only absolutely necessary from the standpoint of health, but are a great factor in moulding or forming the character of a people.

The one important factor in the cultivation of a plant is environment. Environment treats of the mental, physical, and moral condition that surrounds the individual. Environment can overcome in a degree even adverse hereditary conditions. Hence all progress hinges on a betterment of environment. The materia medica of 25 years ago is obsolete; less medicine is the rule and more fresh air and exercise. Therefore a city that does not acknowledge the necessity of public squares, parks, or lungs, as a means for promoting the welfare and happiness of its people, and recognize the substantial advantages that follow the making of a city attractive and com-

fortable as a place of residence, is not progressing, but is already on the wane.

How to make life in crowded centers healthy and agreeable, is the subject of anxious thought, study and debate the world over, and that locality coming nearer to a practical solution of the problem, gives evidence of a higher civilization than others less fortunate in their endeavors.

Any population which, realizing the primitive conditions surrounding it, refuses to rest content with the unwholesomeness of old conditions and demands broader and better paved streets, more scientific drainage and sewerage, and a pure and abundant water supply, better public cleansing, better and cheaper illumination, better housing, better and cheaper urban transportation facilities, better educational facilities, better parks, and opportunities for recreation, and more beautiful and reverential abodes for the dead, and all those other improvements, which modern science suggests, demonstrates the enlightenment of its population and will surely reach to the goal of its desires, a high standard of modern and scientific living.

There is another subject I desire to touch upon this evening, which I am quite sure is one that is also of deep interest to you.

About three years ago the nightmare of pestilence hung over us like a pall. Cordons of quarantine encircled us in a vise. Millions of our commerce were diverted to other ports and the march of progress for a season was halted. The yellow peril, not such as the Russians encountered on the plains of Mukden, but a more dreaded foe, made its appearance in our midst. Our community was thrown into spasms of excitement, and our cousins in adjoining states went frantic with fear and trembling. The memory of that troublesome summer and fall of 1905 is fresh in our minds. We must confess, however, that we have been slow and negligent for not turning the severe lessons taught us into profit. When other ports in the country had quarantined against us, and we realized that millions of our trade were being lost, and business stagnation and depression was in evidence everywhere, the enthusiasm of the people was great in co-operating in an effort to drive out the public enemy. The manner in which the situation was handled and the lessons deduced from scientific re-

sults convince us that a port like New Orleans, especially when confronted by a situation such as existed at the time, is in need of a sanitarily constructed and scientifically equipped isolation hospital. In fact, the matter took root in the public mind, and some of our influential citizens started to organize, so as to provide the ways and means for its immediate construction. Unfortunately, as is often the case with us, after the trouble was all over, and the Mardi Gras festivities came around, the idea seemed to have completely died out, were it not for the initiative recently taken by the president of our City Board of Health, in his effort to have the cash balance which was left over from the yellow fever fund of 1905 dedicated towards a fund, the balance of which is to be raised, for an isolation hospital, for the care not only of yellow fever, but all other contagious diseases.

Experience as well as the latest development in science and sanitation teach us that the once dreaded yellow fever, when properly handled, is no longer to be feared. It has been practically demonstrated that it can be controlled and suppressed if properly isolated. To think of all that we have suffered in the last half century, and of all that has been lost to us in material wealth through epidemics, and to think how well-armed and protected we are to-day against the yellow danger if we but turn to account the valuable lessons imparted to us in the recent past. Yet we are no further advanced to-day, although three years have elapsed. It seems unpardonable, not to say almost criminal negligence.

We are to-day at a stage of development when we cannot afford any more setbacks. We have had enough of them during the last half century. War, famine, overflows, financial panics, pestilence, not to speak of misgovernment, have succeeded each other. But through the dark clouds that obscured our vision could be seen occasionally the faint streaks of light. After buffeting the waves of adversity, with hearts staunch and true, and after having lifted our city from the slough of despond, there came a great dawn radiant with great promise, pointing the way to a higher destiny. The past were years of trials necessary to evolution. To-day we are gradually adopting newer methods, which science and experience suggest.

Sentinel-like, our city stands guard at the entrance of a valley greater in natural resources than the historic valley of the Nile. A few days' sail across the blue waters of the Gulf puts us in touch with the ports of the West Indies, Central and South America. We are, therefore, a semi-tropical port, and upon the commerce of the tropics and through the isthmian waterway when thrown open to the nations, on the vast commerce of the continents and islands of the Pacific Ocean, we must depend for trade expansion and supremacy.

As long as we trade with the countries mentioned, it is naturally to be expected that contagious diseases or fevers like yellow fever are bound to slip through our gates every now and then.

It seems absurd to contend that New Orleans will never again see a case of yellow fever. We are bound to have it again; you cannot keep it out, no matter what measure of prevention you adopt, as long as our port is trading with the nations of the Caribbean Sea or the Pacific Ocean. What we must do is to teach the people that science and sanitation have disarmed forever the yellow monster. What we have to do is to teach the people to have confidence in their sanitary officials and to co-operate to the extent of providing necessary safeguards, so that if the yellow fever does come to our port, that that fact is of no more serious consequence than if it entered the port of New York or Philadelphia, for the reason that the isolation hospital is here to take care of the situation; to control it and to suppress it.

If we persist in the old theory and practice of bottling ourselves up by resorting to extreme quarantine restrictions, we might as well abandon all efforts to maintain our trade supremacy on the Gulf. The markets of the West Indies and Latin Americas, and the prolific markets of the Pacific, are the fields from which we must draw our trade and upon which depends our future commercial wealth and development.

Make it too difficult for them to reach us, or for them to enter our port, and the wealth and commerce Nature destined for us will be diverted to more progressive centres. All the advantages we possess as a port with deep water, and all our rail and water transportation facilities that ramify through the Empire Valley of the Mississippi, will amount to naught. Commerce seeks the

lines of least resistance. In the last half century the march of progress swept majestically across the continent, and carved out of the wilderness an empire rich in wealth and civilization. The circle of the world's trade movement has reached the Gulf of Mexico, and it depends as much upon our common sense views and upon our adopting those methods and precautions recommended by science and experience in safeguarding the public health, as upon our vigilance, enterprise and energy, as to whether New Orleans is to have the proud title of queen wrested from her.

I came across an interesting pamphlet a day or two ago, which contained the report of Dr. Sidney Theard, with the outline of a plan I would imagine might be termed ideal and practical. The plan was endorsed by the Orleans Parish Medical Society and the City and State Boards of Health. This was in 1900. The measure went to the Mayor and Council and died a slow death. This plan should be revived. No doubt the average mind, who in 1900 was unable to grasp the wisdom of the suggestion, has had certainly enough object lessons and knowledge imparted to it, since 1900, to be able to appreciate not only the practicability, but the imperative necessity for the city taking up the matter immediately and crystalizing it into a reality. The plea of no money cannot be taken as an excuse. Since 1900 our city's revenues have increased over a million per annum. If it were five millions per annum, you would hear the same old cry, for our municipal needs are many, but of all our needs there are none that surpass in urgency and importance this one, the creation of an isolation hospital, so as to enable us, whenever contagion of any kind enters our gates, to immediately remove it to a place of safety, where it can be treated and the disease suppressed.

This is a matter that should appeal to the support of the layman and physician throughout the state, and I believe if it were agitated vigorously you would find the entire medical profession of Louisiana lending their support and influence, as well as the majority of laymen, to obtain state aid, if necessary, for it concerns the people and prosperity of the whole state of Louisiana.

And last, though not least, an isolation hospital under the control of the government and Board of Health, would wipe out the infamous contract system of caring for smallpox, the toleration of which is a disgrace to a civilized community.

No class of citizens are more eminently equipped and better fitted and able to assist in this great work of reform than the physicians.

They come in contact with the people, and know more of human character and wants, than any other class of men. This statement is borne out by facts, as the long line of noble acts of heroism, of disinterestedness, in the cause of science and humanity the world over attest the glory and credit that rightfully belongs to medical science and her devotees.

For this reason, I say, around this noble profession, we should draw the circle of respect and appreciation, and place over her shoulders the mantle of legislative protection, that will prevent the possibility of quacks and charlatans seeking shelter and profit within the Temple of Esculapius.

With the influence of a body like the Orleans Parish Medical Society, and, in fact, the profession throughout the state, much can be accomplished in the educational line to develop the civic standards necessary to the attainment of a high civilization and the maintenance of an enduring prosperity.

The year 1908 has come with its potentialities for good and evil; its lessons learned of past errors and dearly acquired experience, its warning; its dangers; and its hopes as brilliant and many-hued as a Western sky when the sun sinks to rest.

It now behooves the good City of New Orleans to welcome the advent of these auspicious promises with that spirit of progressive ambition which the accumulated enlightenment of the past century and her own peculiarly advantageous location both justify and command.

Inaugurating those municipal improvements which science and progress have declared essential for the well-being of all large centers, the initial step is taken for a rapid and unprecedented development.

When the intrepid Bienville marched across the swamp from Biloxi and planted the standard of France on the banks of the broad-rolling Mississippi, he must have had the same prophetic vision which caused the matchless statesmanship of the immortal Jefferson to acquire from Bonaparte the immense Territory of Louisiana.

The territory acquired has developed into a majestic empire, whose constantly increasing wealth from forest, field and factory is pouring through our gates the tide of an irresistible commerce.

The city founded by Bienville, Phoenix-like, has risen from out of the swamp and morasses, and to-day sits like a queen upon a throne of royal state, which will far outshine the wealth of ancient Tyre, when in the glory of her pride and splendor she wielded the sceptre of trade in the Mediterranean. It behooves us, therefore, to anticipate the dawn of this magnificent era and accelerate its coming by putting our house in order, and adopting all the progressive methods recommended as practical and useful in safeguarding the public health, beautifying our city, making it comfortable and pleasant to live in, and by the raising of our civic ideals and the religious performance of our civic duties, to attain the highest standard in the economic administration of our city.

Municipal progress and sanitation, deal with health, beauty and comfort of communities and states. They point constantly and earnestly to the path that leads away from sickness, death, decay and degeneracy. They are beacons lighting the way to increased public security, comfort, happiness, and great achievements along all lines of human endeavor.

N. O. Medical and Surgical Journal

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The Sanitary Wave.

The task of insuring the public health seems to grow greater and greater with the advancing civilization.

The personal liberty of the individual is in such matters entirely subsidiary to the general welfare, and this is to-day conceded. Boards of health have gradually grown in their usefulness from the primary police function which they both practiced and enjoyed. Where health authorities have grown into fine organization, almost every function relating to the public health has come within their supervision, and not only do such boards look after the births and deaths, but they watch the milk supply, foods of babies, the care and conditions incident to the development of the child, the housing, training and hygiene of youths at school, and finally direct the conditions of construction of public buildings with a view to the best sanitation. The public is warned against public dangers, the process and purposes of vaccination, and of the use of anti-toxins and sera are promulgated, until to-day the public is itself doing some thinking on its own account, so far as health matters are concerned. Still, the seasons bring the recurrence of certain epidemic diseases, and everywhere these are variously accounted for. Smallpox prevails in one section, while the influenza spares none; typhoid, diphtheria and other infectious diseases divide public sanitary interests, while vast centers of cholera, plague, leprosy and other indigenous diseases remain, like the unknown seas, for future attack by science and by endeavor.

The layman has not remained idle meanwhile. The mighty protests of St. Louis against the Chicago Canal to the Mississippi is historic. Now the Merchants' Association of New York is working at some provision for the disposal of the sewage of that me-

tropolis, other than that at present practiced by the process of dumping into the waterways contiguous to New York. The gentlemen constituting the officers of the Merchants' Association of New York are all eminent in the city's industrial work. These men have carefully investigated and tabulated the evils of the present system. Their reports show an awful condition, as shown by chemical analysis, and the spots of typhoid infection along the river boundaries seem to make the argument for a reform conclusive.

New Orleans is on the eve of improved sewerage facilities and water supply, and it might be well to weigh the work of the New York committee as we move along, so that we can profit by the mistakes of that city.

The Health Conference.

The third annual health conference, to be held by the State Board of Health in Alexandria, is announced for March 31 and April 1 and 2. We sincerely hope that the conference will be well attended and accomplish all the good that can be expected of it, but we must, at the same time, frankly express our regret that the President of the State Board of Health has again called the conference just a little ahead of the date fixed for the meeting of the State Medical Society. If he desires the full co-operation of the medical profession, it would be well for him to give more consideration to the date of the conference. If fixed either immediately before or after the State meeting, many could attend both; or even if the date was a totally different one, there would be no interference one with the other. However, the selection of a date just three weeks ahead of the State Society meeting makes it necessary for each man to decide which of the two he will attend, as it is practically impossible for anyone from any distance to attend both, which would necessitate either a stay of over three weeks in Alexandria or two trips within the three weeks. It may be too late for the President of the State Board of Health to change this date, yet we mention this in the best spirit, in order that in the future he may give the matter due consideration.

(Since the above was written the State Society meeting has been changed to May, but this does not diminish to any extent the force of the argument.)

Fifth Pan American Medical Congress.

Elsewhere we print the announcement of the Fifth Pan-American Medical Congress, which will take place in Guatemala on August 5 to 10, 1908. We hope that a good number of the profession of this city and State will arrange to attend the Congress, and it will be well for them to make some arrangements in advance, in order that the trip may be made as pleasant and satisfactory as possible. All these congresses have been most interesting, and at the same time have given the opportunity of visiting countries south of us, that are little known to us, and yet with which we ought to have much greater communication. Even now, but especially after the completion of the Panama canal, New Orleans is the logical and convenient point of entry for the South and Central American countries, and we should cultivate closer relations with our confreres at those points.

The climate of Guatemala is agreeable in August, as there is very little rain at that time and the heat is much less than it is here, as Guatemala is situated on a plateau which is comparatively cool. There easily can be chartered a good steamer to make the trip from here to Port Barrios, and it probably will not be difficult to arrange a very pleasant itinerary, including trips to other points. In the Republic of Guatemala itself no charge for transportation will be made.

The JOURNAL will be glad to assist in any way in arranging something for the occasion.

Miscellany.

Parisian Medical Gossip.

Translated by DR. THOMAS C. MINOR, Cincinnati, O.

MEDICINIA: In a *feuilleton* the *Journal de Medecine de Paris* remarks: We lately said that a reaction had commenced against the merchants in microbes, anopheles, fleas, flies, etc., etc.

We may now say the tension is increasing. Truly, there should not have been so long a delay. Just listen what that sensationalist, Metchnikoff, claims. We must not eat or drink foods that have not been sterilized. Have a contempt for bread unless well baked,

for the flour may contain bacilli. Roussell goes even further; he attributes the tuberculosis so common among bakers to spores of the Koch bacillus, that have resisted the heat of cooking; also, all milk and water should be well boiled; meats must be very much baked. Adieu to the rare roast beef of old England, with its blood gravy. It is also absolutely necessary to hard-boil the eggs, and never touch them in their shells; no soft-boiled eggs, for they may have been contaminated in the hen's ova duct. Let fruit severely alone; berries with skins may contain microbes; cherries are bad, since robins and blackbirds may infect them while pecking at the ripe fruit.

MICROBIANA: What a regime! Fortunately he has one of the lone voices of alarm crying from the terrified microbial wilderness. Paugh!

We should observe, like Henry Maret in his beautiful book, "*Paroles d'un Sauvage*": "I complain with all my heart of those medical cowards and alarmist scamps who never have a moment's quiet, and who live in a perpetual state of terror; those so-called scientific medicos, who weigh babies every five hours, calculate the cubic feet of air in the room, pass their water through filter paper, never ceasing to disinfect, and indulging in chemical analysis at each paid opportunity; using antiseptic combs and brushes, and always moving around like cowardly curs with tails between their legs." There are the gents, too, who alarm the public through the junk advertising public press with the horrors of all manner of germs.

See, my dear readers, to what an extent microphobia may be carried. In America now even—that land of the glad handshake—hand-shaking is now falling into desuetude, if one does not have on a pair of germ-proof hygienic gloves. One, too, must not expectorate save on a handkerchief, that may afterward be sent to the poor washerwoman with five children. If you go to an American hotel, be sure and see that the bed sheets have been disinfected. If you travel on a sleeper, be certain that the car porter has permitted no New Orleans or Memphis "skeeter" to enter his Pullman. Travel is becoming very pleasureable now in America! If a fellow passenger coughs, insist that some sanitary official be called in to test the sputum for Koch bacilli. Every cough is

now a suspected case of tuberculosis. Americans were the inventors of all traveling luxuries; now they make their trips in terror, warned by placards on the cars and street cars, "Do Not Spit—It Is Dangerous." They use carbolic acid and iodoform, wash their mouths in the lavatory with listerine, spit in the wash basin that the next passenger must use, and perform at the caprice of each State Board of Health in a manner imitative of simians. You will see vaporizers in some button-holes, containing antiseptics disguised with violet and lavender waters. One can squeeze the bulbs of these vaporizers and disinfect without being noted. The air of some Pullmans the early morning, full of bad air and dirty stockings, evidences the fact that the vaporizer should be used on the feet. Some of the nouveaux riches, the multi-millionaires with ill-gotten wealth, now have glass rooms to sleep in. They think thus to protect themselves against the insidious microbes. What a curious sanitary idea?

IS WINE A GERMICIDE? We said at the start that a reaction against all this medical nonsense has set in. We can give absolute proof of this in France. Salsazer and Morcandier, of the Pasteur Institute, have proclaimed that wine is an excellent destroyer of the typhoid bacillus. So much the better! Let all the world now go to wine drinking. In Germany Pilsner and Coburger beer kill the coli bacillus, by drowning it in floods of malt extract. Good for the beer germicide!

DOES PURE WATER PREVENT APPENDICITIS: Dr. Doleris, member of the Academy of Medicine, gives us an interesting paper on the "*Vin du point de vue de l'hygiene.*" This drink is the best hygienic liquid extant, according to the doctor. Good for Doleris! Bravo, distinguished confrere! He even goes further and makes an original point, i. e., that *the exclusive use of water always induces attacks of appendicitis.* Go to, thou false prophet, Metchnikoff! Yet, we hardly believe that all water drinkers are ever subject to appendicitis.

All wine growers, even down in the Midi, must applaud Doleris. Yet it is true that the deluge destroyed more people at a given moment than all the alcohol ever manufactured since. Was it not that immortal Dr. Rabelais who sang in prose so enchantingly of the Septembral vintage? Rabelais always prescribed good, rich

wine for his patients, and never knew of deadly coal tar derivatives.

Armand Gautier, in a paper before the Society for Wounded Soldiers, entitled "What They Must Eat and Drink," says it is unfortunate that wine should ever be in disfavor. He shows how for years past, and even now, the vast majority of physicians prescribe good wine for the debilitated and those convalescing. "Since some physiologists of the stomach," says Gautier, "are too delicate, and other doctors preoccupied with the evils wrought by alcohol, overlooking its virtues, some crank physicians have had the curious idea of drawing their conclusions from the direct injection of alcohol into the veins, or under the skin; such a class of men ever proclaims then that alcohol is a poison, because it worries a poor cat or kills a guinea pig. So that beautiful conclusion, viewed from a scientific experimental point. *Water is sober.*

Armand Gautier likewise observes: "If bread, meat and wine poison us slowly, let us at least prove that their moderate usage shortens human life, rather than create public fear by such extra scientific exaggerations that have come to poison all human existence in these modern days." True practitioners of medicine are never led astray by the wild, sensational statements of pseudo-medical scientists, whose principal occupation in life seems to be to attain newspaper notoriety by the most absurd and ignorant claims. There are too many medical savants, without practice or experience, whose only stock in trade is a broken-down microscope and a few microbial slides; gento with long hair and dirty finger nails, who abound in all manners of bugs, including the humbug, observed in many phases of present day medicine of the alleged scientific variety. The alchemists of the middle ages were never such frauds even. One must be as blind as a leech not to see how the masses of the public are deceived by the geniuses of the laboratory and the ill-paid agents of prudent disinfectant manufacturers. Some manufacturing concerns in Europe have medical men as commercial agents, starved-out practitioners, who travel from doctor's office to doctor's office, showing good men how to practice.

VIEWS OF FRENCH PHYSICIANS: Dr. Lecuyer, in "*Correspondence Medicale*," must needs take a slap with the numerous other physicians who have of late attacked the microbians. Says

Lecuyer: "Up to the present epoch we have all imagined France was a country of good medical common sense. I fear we have lost some of our reputation of late years by a too strenuous advocacy of some ridiculous medical theories. As propagators of microbes we are unsurpassed; germs are more common now than the evil demons of the Evangelist. We can no longer eat and drink without some alleged savant discovers some new form of germ, with the Pasteur Institute patent mark. What happiness longer in human existence? Happily, chemistry promises us synthetic foods, guaranteed free from microbes. How agreeable the banquets of the future will prove. The XXI century doctor will ask the restaurant waiter, "What is on the bill of fare?" and the garcon will reply, "Hydrocarburides with nitrogenous sauces." The waiter of the future will not wear moustaches, but have antiseptic anointed faces and hands; no germs will be permitted on napkins or dishes. "Is it not absurd," says a member of the Academy, "to permit restaurant waiters to be anything but baldheaded and beardless?"

The parasitologist Blanchard, in a late communication to the "Academy of Medicine," declares a war to the death to all mosquitoes, flies, fleas, lice, crabs, bedbugs, roaches, trypanosomes, etc., etc.—*Puer, abige, culecis!*

One must never keep a cat or a dog around. Adieu, gentle canaries, jolly pugs, innocent kittens! Adieu, all ye pets of the old maids! Dogs and cats may have within them a *taenia*, answering to the net name *Dipylidium caninum*, very rarely found in the human subject. How can mankind catch this germ beauty? Good Lord, very easily. Blanchard tells his fellow members of the Academy they may be contaminated by the absorption of body lice *swallowed* in a glass of milk. Ergo, beware of the milk.

These lice contain germs, embryonic *taenia*! Dr. Remliger, of the commercial house of Roux, Pasteur & Co., Limited, claims that the sarcoptic mange of the dog (*sarcoptis scabies var. canis*) is transmissible to men, as well as ringworm (*tonsurans*) of the dog and cat (*trycophyton felineum*). But this is not all—every infectious disease may be carried by the fur of the dog and cat. All the world has been well aware of this fact long before the microbian era—and before Pasteur was born.

So dogs and cats should really be banished from hospitals and

the sickroom. This doctrine was enunciated a century ago—"non novem sub sol." A volume on the part played even by insects in the transmission of disease was published a century and a half ago. One should wash his hands with antiseptic soap after patting any dog on the head or scratching a cat's back. They might have germs, you know. Parodying the jolly chorus of the "*Petit Duc*":

*"Pas de femmes—pas de femmes;
C'est le mot d'ordre du Colonel."*

so we might ring in medical chorus:

No dogs, no cats, no rats,
That's the Professor's word of order.

Ah! Poor pet animals, why will you continue to live along with tubercular cows and the sheep with charbon

Sterilize, then, ever sterilize; wash in boiling water, kill the microbes, if you will, but do not let them kill you with fright. Methuselah and the Patriarchs of old probably had the same microbes, but, alas, had no microscopes to search for them! Go to, ye medical imbeciles, who are ever on the lookout for probable causes of disease. Meantime those who think least of the microbes are rarely infected.

MISCELLANEOUS

COLLOIDAL METALS.—In concluding an article on the Organization and Evolution of Matter, Dr. Lematte (*Gazette Médicale de Paris*) writes as follows:

We are beginning to employ in therapeutics one form of atomic dissociation. The colloidal metals constitute one of the best types of substances that escape the ordinary laws of chemistry. They are obtained by causing electric sparks to flash between two metallic stems immersed in distilled water; the liquid becomes colored and contains some metal. The name of *colloidal metal* is given to this unknown substance; in doses of one three-hundredth of a milligram to a liter of water, it exerts an energetic action. The filter cannot separate the particles that are invisible under the microscope. We must regard the metallic colloid as being formed by the dissociation of the atoms of the metal. The colloidal metals possess properties having no resemblance to those of the same metal in solution.

They seem to approximate the oxydases. In doses of 5 or 10

cubic centimeters, they give in certain infections remarkable results in increasing organic changes with an overproduction of urea and uric acid.

No *chemical reaction* can explain their properties; their mode of preparation authorizes us to say that they contain the metallic atom dissociated.

They are not *radio-active*. This does not militate against our hypothesis, inasmuch as radio-activity is produced only during the dissociation of the atom. Protoplasm may be described as a collection of colloidal substances.

The *diastases*, the *toxins*, the *enzymes*, have reactions resembling those of colloidal substances.

They act in extremely small doses. Two drops of a 1 per cent solution of tetanotoxin can kill a horse. According to Mr. Gautier, one gramme of this substance could kill seventy-five thousand men.

These poisons have their counter poisons. Corrosive sublimate, prussic acid, nitrate of silver, are without action on the venom of the cobra, whereas traces of an alkaline salt prevent it from acting.

The *toxins* and the *soluble ferments* are metallic ferments capable of producing effects outside of the body which elaborated them. If they are deprived of the infinitely small quantities of mineral matter which they contain under a form resembling the colloidal state, these bodies become inert.

All these reactions occur in the presence of *water*, which is a magical combination without which no organic manifestation could take place.

The study of the metallic ferment will perhaps furnish the key of these hydrations, dissociations, analyses or syntheses, which result in the organization of our tissues and the manifestations of vegetative life.

The pepsins, the pancreatins, the trypsin, the oxydases and reductases which decompose our foods and liberate their potential energy, are *biochemical colloids*, the useful effects of which we can control, though we know nothing of their *intimate essence*.

A. McS.

THERAPEUTIC USE OF CALCIUM SALTS.—Dr. A. Netter says that the superiority of sea water over artificial serum is due to the

presence of calcium and potassium along with the sodium salts in the marine serum.

On February 10, 1906, Dr. Netter spoke of the efficacy of the injection of chloride of lime as a means of preventing the eruptions that sometimes follow the injection of anti-diphtheritic serum. In 1868 Baudon reported, in the *Bulletin de Thérapeutique*, a cure of grave nephritis by iodide of calcium.

Netter states that Stromeyer praised the marvelous results obtained from phosphate of lime in hematurias from every cause.

All mineral waters famous for their efficacy in renal affections contain salts of calcium.

Lauder Brunton recommends chloride of calcium in pneumonia. It is a perfect cardiac tonic. He gives from five to ten grains of chloride of lime every four hours. For the last two years Netter has given chloride of calcium in pneumonia when the patient had a weak heart. The improvement is seen in the general condition of the temperature, the local phenomena and the duration of the disease. Crombie thinks that these calcium salts have, so to speak, an antitoxic action on the pneumonic poison.

The calcium salts are useful in the treatment of urticaria, acute edema, chilblains and pruritus (A. Netter).

Modern works dilate on the biological importance of calcium. The calcium-ion is antitoxic with respect to sodium-ion. It displays activity against all the poisons that give rise to urticaria.

The calcium salts modify pruritus; they suppress the eruption. They are among the best remedies against essential pruritus. Ross has reported three cases of headache, accompanied with urticaria and chilblains, in which the administration of salts of calcium caused the complication to disappear at the same time as the headache. The accidents reappeared after the ingestion of citrate of potassium. Citrate of soda brings on a cutaneous hyperexcitability.

In therapy we may employ either the chloride or the lactate of lime. It is best to give them for eight or ten days, and to suspend treatment one day in every four days.—*Gazette Médicale de Paris*, May 15, 1907.

A. McS.

NEW TREATMENT OF TUBERCULOSIS BASED ON THE ANTITOXIC ACTION OF THE LIVER.—At the meeting of the Paris Academy of

Medicine, Oct. 8, 1907, Drs. Lemoine and Gérard (of Lille) discoursed on the beneficial action of the biliary secretion in tuberculosis. They referred to the antitoxic action of the bile and biliary acids in certain poisons, and particularly against the venom of vipers.

They injected tubercle bacilli into the peritoneal cavity of a guinea pig, and afterwards injected hypodermically cholesterin and the ethereal extract of bile. These injections caused no unpleasantness, local or general; they seemed, indeed, to have arrested the evolution of the tubercular process.

Their investigations in cases of human tuberculosis have given results equally favorable in all stages: diminution of night-sweats, of fever, of prostration, slowing of the pulse and lowering of its tension, disappearance of anorexia. — *Le Progrès Médical*.

A. McS.

A CASE OF TETANUS CURED BY INTRA-DURAL INJECTIONS OF SULPHATE OF MAGNESIA.—(Morgan Franke in *Contralblatt für innere Medicin*.—*Gazette des Hopitaux*.)

Meltzer has shown that the salts of magnesium exert an inhibitive action on the activity of the nerve-substance; the intra-dural injection, in a monkey, of a solution of sulphate of magnesia in the dose of six centigrams of the salt to each kilogram of the animal's weight, causes, first anesthesia, then paralysis, of the lower part of the body, afterwards extending to the upper part. The anesthesia comes on three or four hours after the injection. The only signs observed was retention of urine, and, at times, dyspnoea, which disappeared on the use of artificial respiration.

Franke has applied this method in the treatment of a case of tetanus occurring twelve days after a punctured wound of the finger. Nine days after the beginning of the disease, when the contractions were progressing, an intradural injection was made, of one cubic centimeter of a 25 per cent solution of sulphate of magnesia. After this injection, for sixteen hours the spasmodic contractions disappeared and the permanent contractions diminished.

These symptoms returned. Five days and nine hours later, a second, and then a third injection was made, each time of two cubic centimeters.

After the second injection, for a period of thirty hours the clonic and tonic spasms disappeared, but returned again, though in a much milder form. After the third injection, the symptoms again disappeared, and some very slight muscular stiffness, without appreciable clonic crisis. After that, the patient went on to convalescence. The only inconvenience noted was a slight dyspnea which followed the second injection, and disappeared without treatment.

Franke looks upon the treatment with sulphate of magnesia only as a symptomatic treatment which does not exclude the simultaneous employment of other procedures, especially the treatment of the tetanogenous wound.

A. McS.

Louisiana State Medical Society Notes.

In Charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

CHANGE OF DATE OF MEETING OF STATE MEDICAL SOCIETY.—At the suggestion of the Rapides Parish Medical Society, made on account of the delay in the completion of the large hotel now building in Alexandria, the Council announces the postponement of the annual meeting of the Louisiana State Medical Society to MAY 13, 14 AND 15, 1908.

SUBJECTS OF SECTIONS SO FAR RECEIVED.

GENERAL MEDICINE.—Chairman: Dr. J. B. Elliott, Jr., New Orleans. Subject: "Symposium on Nephritis."

NEUROLOGY.—Chairman: Dr. E. M. Hummel, New Orleans. Subject: "The Symptoms and Pathology of Multiple Sclerosis."

OPHTHALMOLOGY.—Chairman: Dr. J. A. Caruthers, Baton Rouge. Subject: "A Plea for the Examination of the Eyes of School Children."

OTOLOGY.—Chairman: Dr. R. F. Harrell, Alexandria. Subject: "Acute Inflammatory Affections of the External Ear, with Special Reference to Their Differential Diagnosis from Middle Ear Affections, and Treatment."

SURGERY.—Chairman: Dr. J. L. Wilson, Alexandria. Subject: "The Importance of Surgical Intervention in Intestinal Lesions of Typhoid Fever."

ANATOMY AND PHYSIOLOGY.—Chairman: Dr. J. G. Martin, Lake Charles. Subject: "The Anatomy and Physiology of the Thyroid Gland."

GENITO-URINARY.—Chairman: Dr. F. J. Chalaron, New Orleans. Subject: "Gleet: Its Causes."

OBSTETRICS AND GYNECOLOGY.—Chairman: Dr. C. Jeff. Miller, New Orleans. Subject: "The Surgical Treatment of Puerperal Infection."

X-RAY AND ELECTRO-THERAPEUTICS.—Chairman: Dr. S. C. Barrow, Shreveport. Subject: "Some Therapeutic Uses of the X-Ray."

MEDICAL JURISPRUDENCE.—Chairman: Dr. H. L. Ballowe, Buras. Subject: "Shall the Average Country Practitioner Testify Before Our Juries as an Expert?"

IMPORTANT NOTICE.

Chairmen of other sections are urgently requested to send in their titles at once to this office.

THE BIENVILLE PARISH MEDICAL SOCIETY met at Gibsland, Parish, on January 14, 1908. Meeting called to order by the president, Dr. Colvin, of Gibsland. Members present: Drs. O. O. Hamner, J. Atkinson, F. M. Thornhill, A. J. Pennington, H. L. Smith, S. J. Colvin, M. B. Cullpepper, A. B. Nelson and F. R. Singleton.

Resolutions committee reported. Dr. Thornhill read resolutions on the death of Dr. Pennington, and Dr. Nelson on the death of Dr. J. H. Givens. Motion was made that both of these be published in our Journal, copies sent to the families of the deceased, and the same be spread on the minutes. Carried.

After the secretary's report, the society went into the election of officers, with the following results: Dr. O. O. Hamner, of Bienville, president; Dr. C. C. Alums, of Ringgold, vice-president; Dr. F. R. Singleton, of Arcadia, secretary-treasurer.

After an interesting paper on "Ectopic Gestation" by Dr. Nelson, and discussion, the society adjourned to meet at Arcadia, La., on the second Tuesday in April, 1908.

The following resolutions were read and adopted:

Dr. T. H. Pennington was born in Troup county, Georgia, Jan. 5, 1834; and moved with his parents to Claiborne Parish, La., in 1848. He received a good English education, beginning in his native State and ending in Louisiana, the State of his adoption. While a very young man Dr. Pennington began the study of medicine under the tutelage of Dr. J. M. Scaife, of Claiborne Parish. His first course of lectures was taken at the University of Louisville, Louisville, Ky., finally graduating from the medical department of the University of Louisiana, New Orleans, La., in the year 1856.

Soon after his graduation he began the practice of medicine at Lisbon, Claiborne Parish, La., where he soon succeeded in building up a large practice and taking high rank in his profession, where he continued to practice till the year 1884, when he removed to Arcadia, Bienville Parish, and engaged in practice, where he continued till the day of his death, which occurred on June 22, 1907, at the age of 73 years, 5 months and 17 days.

Dr. Pennington always took an active interest in medical organizations, having been a member of the first medical society ever organized in North Louisiana, and was an honored and respected member of the Bienville Parish Medical Society and of the Louisiana State Medical Society at the time of his death, which occurred suddenly while on his way from his office to his residence at the date above mentioned.

Although Dr. Pennington had passed the age of three score and ten years allotted to man, he continued to do an active and extensive practice, and literally died in harness, having visited patients on the day of his death.

In the death of Dr. Pennington the profession has lost an honored and useful member and the Bienville Parish Medical Society deeply deplores his loss and desires here to record its appreciation of his virtues, both as a physician and a citizen.

Dr. Pennington was a man of high sense of honor; his private life was exemplary and his character was above reproach. He occupied a high position in the Masonic order, and was a zealous and consistent member of the Methodist Church.

We recommend that a copy of these resolutions be incorporated in the minutes of our Society, one furnished the family of Dr. Pennington, and one to the N. O. MEDICAL & SURGICAL JOURNAL for publication.

Committee—F. M. Thornhill, M. D., A. B. Nelson, M. D., and Geo. F. Wilson, M. D.

WHEREAS, It has pleased the Almighty and All Wise God to remove from our midst our brother in the profession, Dr. J. H. Givens, of Arcadia, La.

WHEREAS, We realize what death means under these circumstances, and that the profession suffers no greater loss by the death of Dr. Givens than the community in which he practiced, as well as the Bienville Parish Medical Society, of which he was a member:

Therefore Be it Resolved, That the members of the Bienville Parish Medical Society extend to his loved ones their heartfelt sympathy in this, their hour of bereavement.

Resolved 2d, That these resolutions be spread upon the minutes of the Bienville Parish Medical Society, and that a copy of the same be sent to Dr. Givens' family; also a copy sent to the NEW ORLEANS MEDICAL & SURGICAL JOURNAL for publication.

Committee—F. M. Thornhill, Geo. F. Wilson, A. B. Nelson.

Medical News Items.

THE RICHARDSON MEMORIAL BUILDING BUILDING OF THE TULANE MEDICAL DEPARTMENT.—Plans have finally been accepted for this building and the contract let to Mr. George J. Glover of New Orleans. The new medical building for first and second year students, to be erected on the campus of the Tulane University, will be three stories high with a nine-foot basement. The basement will contain divisions for the departments of minor surgery, original research, etc. The first floor is to carry a large lecture room, with

laboratories for physiology and pharmacology, in addition to the offices for the administration. The second floor is planned for the departments of pathology, bacteriology and histology, and will provide private laboratories for research. The third floor will contain dissecting rooms, an anatomical museum and special rooms for the curator of the museum and for the professor of anatomy. There will also be a large lecture room on this floor.

The building is to be provided throughout with modern sanitary plumbing, heat, and all appliances required in a modern medical school. The exterior of the building is to be romanesque in style of architecture and to be constructed of gray stone filled in with brick of the same color. The price of the building is to be within \$150,000.

THE FIFTH PAN-AMERICAN MEDICAL CONGRESS.—The government and the people of the Republic of Guatemala, as well as the National Committee of the Fifth Pan-American Medical Congress, are actively engaged in organizing this meeting to take place at Guatemala, the capital of the Republic, on the 5, 6, 7, 8, 9 and 10 of August, 1908. All interested are requested to communicate with Dr. Ramon Guiteras, No. 75 West 55th St., New York City.

THE AMERICAN INTERNATIONAL CONGRESS ON TUBERCULOSIS is to meet in the city of Chicago on July 1, 2 and 3. All persons interested can communicate with Dr. Juan J. Ulloa, No. 66 Beaver St., New York City.

A REQUEST FOR INFORMATION.—Dr. Horace Packard, at No. 470 Commonwealth Ave., Boston, Massachusetts, desires information regarding any alleged recoveries or cures of inoperable or recurrent carcinoma of the mammary gland. If any case or cases are known to anyone who reads this and can be authenticated by facts as to the history and condition prior to recovery and length of time which has elapsed since recovery, such information will be appreciated and duly acknowledged. Any well-authenticated reports of recoveries from carcinoma located in other parts than the mammary gland will be welcomed. Cancer paste cures, X-Ray cures, radium cures, or cures as result of surgical operation are not wanted. Hearsay cases are not wanted unless accompanied by name and address of the person who can give knowledge first hand.

TRAINING IN MEDICAL ORGANIZATION.—The students of the University of Pennsylvania Medical School have formed an organization the purpose of which is to acquaint the undergraduates with the workings of the American Medical Association, after which it is very closely modeled. The various student societies take the place of the State organizations and elect members to a House of Delegates which transacts all the business of the association. An annual meeting is held at which papers are read by chosen members thus encouraging original research and a scientific spirit. The organization is named The Undergraduate Medical Association of the University of Pennsylvania and already has over two hundred and fifty members.

PERSONAL.—Dr. George T. Jackson has been made professor of dermatology, College of Physicians and Surgeons, at Columbia University, to succeed Dr. George H. Fox, resigned. Dr. Jackson has been long connected with this chair at Columbia, and his promotion is a recognition of deserving zeal.

THE UNITED STATES CIVIL SERVICE COMMISSION announces an examination on February 19-20, 1908, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of physician, at \$150 per month, in the Panama Canal Service. It is probable that about fifteen appointments will be made, this estimate being based upon the number of appointments made during the past year.

Applicants must indicate in their applications that they are citizens of the United States, graduates of recognized medical schools, and have had at least one year's experience as interne in a general hospital. Persons lacking the above qualifications will not be admitted to the examination.

Special credit will be given to physicians who show that they have been for more than a year members of the house staff of large metropolitan hospitals. Men only will be admitted to this examination.

Age limit, 20 to 45 years on the date of the examination.

Each applicant for the Isthmian Canal Service will be required to submit to the examiner, on the day he is examined, a photograph of himself, taken within three years, which will be filed

with his examination papers as a means of identification in case he receives appointment. An unmounted photograph is preferred.

Applicants should at once apply either to the United States Civil Service Commission, Washington, D. C., or to the secretary of the Board of Examiners at New Orleans, Baton Rouge or Shreveport, for this State, for Application Form 1312.

A NEW LIBRARY.—Eli Lilly & Co. announce that they have established a library in connection with their scientific department, under the charge of Miss Fanny O. Roberts. The library is supplied with the best of American and foreign publications on scientific subjects.

THE ANNUAL MEETING OF THE HAHNEMAN MEDICAL SOCIETY was held on January 18. There was a good attendance, especially of doctors from the country. Dr. C. R. Mayer was elected President. Dr. M. F. Howe, of Lake Charles, presented the following resolutions:

"Whereas: It has come to the knowledge of the Hahnemann State Medical Association of Louisiana that an effort will be made at the next session of the General Assembly of the State of Louisiana to amend Act No. 49 of 1888 as amended by Act No. 13 of 1896 and to re-enact the same.

"Resolved: That this Association heartily approves any movement which has for its object the raising of the standard of medical education and the suppression of quackery, providing:—no measure is proposed for adoption which will interfere with existing medical examining boards who shall pass upon the qualifications of all applicants who desire to practice the healing art in any of its branches in the State of Louisiana as presently required by the existing law.

"Be it Further Resolved: That a Legislative committee of three be appointed who shall be empowered to protect the interest of this body."

These resolutions were the means of bringing out a free discussion, which proved all present were in favor of raising the standard of the profession. The resolutions were adopted unanimously.

The chair then appointed on the Legislative Committee the following: Drs. Edward Harper, R. S. Moth and John T. Crebbin,

MEETING OF THE TANGIPAHOA MEDICAL SOCIETY.—This Society held its annual meeting at Amite City, on January 15 and re-elected the following officers: Dr. H. G. Morris of Kentwood, President; Dr. Gleen J. Smith of Amite City, Vice-President; Dr. J. L. Lenoir, Secretary. The meeting was addressed at its close by Dr.

Fred. J. Mayer of New Orleans. A banquet was tendered the physicians at the conclusion of the meeting.

VISITING DOCTORS.—Among the visiting doctors the past month were Dr. A. S. Wheeler, Asheville, N. C.; Dr. A. Theriot, Lockport, La.; and Dr. J. C. Dobbs, Ganado, Tex

CHANGE OF LOCATION.—Dr. D. J. Carr, from Abel to Prize, Miss; Dr. J. S. Johnson, from Row Landing to Batchelor, La.; Dr. J. B. Barrett, from Bon Ami, La., to Quinton, Okla.; Dr. W. E. Burt, from Row Landing, La., to Taladega, Ala.; Dr. B. L. Bailey, from Poland to Ball, La.

CLIPPINGS.—Hattiesburg will have a Board of Health and city physician, the latter also being the health officer and meat and milk inspector.

The Texas State Medical Association has 3,000 members.

The New Orleans College of Dentistry has 114 students this year.

MARRIED.—Dr. John L. Scales of Alden Bridge, La., and Miss Ethel Webb of Nashville, Tennessee, were married on December 4, 1907.

Dr. J. P. Keller of Nashville, Tennessee, and Miss Ruth Pipes of Jackson, Louisiana, were married on December 25, 1907.

Dr. J. C. Dobbs of Ganado, Texas, and Miss E. B. A. Horton of Edna, Texas, were married December 31, 1907.

The marriage of Dr. B. L. Robinson and Miss Maida M. McClelland, both of Meridian, was celebrated on January 1, 1908.

On January 3, 1908, the marriage of Dr. James Gatlin and Mrs. Annie E. Brent, both of Hammond, La., was solemnized.

Dr. R. E. Simpson, of Columbia, Miss., and Mrs. Edna Hall Owen, of Hattiesburg, Mississippi, were married on January 3, 1908.

Dr. J. A. Tucker and Miss Virginia Wilkinson, both of Baton Rouge, La., were married on January 14, 1908.

Dr. A. J. Newman of Amite City, La., and Miss Azalie C. Bankston of Hillside, La., were married on January 14, 1908.

DIED.—Dr. J. R. Briggs of Dallas, Texas, died at his home in Oak Cliff on December 29, aged 56 years. The doctor was the

founder of The Briggs' Sanitarium in Oak Cliff, which was intended only for the care of patients suffering from tuberculosis.

Dr. M. L. Banks, 76 years old, died at his home in Columbia, Mississippi, on the 9th of January, 1908.

Dr. J. W. Barber, aged 80 years, died at his home in Purvis, Mississippi, on January 9, 1908.

Dr. P. M. Catching, of Hazlehurst, Mississippi, died on January 13, 1908, at the age of 59 years. He was the second son of the late Dr. Jos. M. Catching, a brother of Dr. J. M. Catching of Hazlehurst, and father of Dr. Leroy Catching of Jackson, Mississippi.

Dr. Robert William Taylor died in New York on January 5, 1908, at the age of 65. He was noted as a practitioner in Genito-Urinary affections, and contributed largely to the literature of those same diseases.

Dr. Nicholas Senn died in Chicago on January 2, 1908, at the age of 63, after a short illness, although he had been ailing for some time. Although born in Switzerland, he was considered an essentially American surgeon, as his parents settled in this country when he was very young, and all of his education, including that for his medical degree, which he received in 1868, was had in this country.

Dr. Senn was one of the foremost of our operators; he was a prolific writer on medical subjects, and his accounts of extensive travels, contributed to various medical publications, were highly interesting and always brought out all medical matters prominently. Dr. Senn was also interested in military surgery; served with distinction in the National Guard of Wisconsin, that of Illinois, and in the United States Army during the war with Spain.

Dr. Senn was popular in New Orleans, which he often visited, his son having selected his wife in this city. Cordial personal relations existed between Dr. Senn and both editors of the JOURNAL.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

Metabolism and Practical Medicine. By CARL VON NOORDEN. In three volumes. Anglo-American issue under the editorship of I. WALKER HALL. W. T. Keener Co., Chicago, 1907.

The vast amount of material which is contained in this monumental work on metabolism makes a critical review almost impossible in the small space allowed in these pages. As a contribution this work must stand for a long time as the expression of ideas brought to the most advanced point in the knowledge and theories of the physiology and the pathology of metabolism. The array of such names as Carl von Noorden, Magnus-Levy, Salomon, A. Schmidt, Czerny, Steinitz, Dapper, Loewi and Mohr indicate the possibilities in a text on the subject in review.

The scheme of the work develops the physiology of metabolism as expressed in the chemical laboratory and practical experimental side, and the student is gradually led into the intricacies of the study of each of the organized structures of the human body as related to the changes which take place in assimilation.

With such a foundation the pathology is then taken up as applied to various diseases which come within the scope of the work, and each subject, or division of subjects, is undertaken by one or another of the authors named above particularly qualified to discuss the same.

Altogether we are impressed with the stupendous effort of the editor and with the amount of result obtained. This magnificent reference book must commend itself to the intelligence of every advanced practitioner of medicine.

DYER.

Atlas and Text-Book of Human Anatomy. By DR. JOHANNES SOBOTTA. Edited, with additions, by J. PLAYFAIR McMURRICH, A. M., Ph. D. In two volumes, with 320 illustrations, mostly in colors. W. B. Saunders Philadelphia and London.

Among the many texts on anatomy, this work must stand out as one of the clearest and most practical in its presentation of the subject, for its chief object seems to be the presentation of exact reproductions of the anatomical divisions. The author has aimed at photographic illustrations and the result is admirable. The arrangement of the text so as to run concurrently with the illustrations makes this exceedingly valuable to the student of anatomy who thus is able to study the subject matter by illustration as he follows the text. No pains have been spared by the publishers in the typographic work, which is of the highest possible standard.

DYER.

A Manual of Hygiene and Sanitation. By SENECA EGBERT, A. M., M. D. 4th Edition. Lea Bros. & Co., Philadelphia and New York.

It has been our privilege to review several of the preceding editions of this handy volume, and we can only repeat the expression of apprecia-

tion for the practical and concise method employed by the author in presenting the essentials of a subject now so much before the medical and general public.

DYER.

Diseases of Infancy and Childhood. By LOUIS FISCHER, with 303 illustrations, etc. F. A. Davis Co., Philadelphia, 1907.

Dr. Fischer's long experience in the practical care of children's diseases, and especially of infectious diseases, entitles him to the confidence of the professional public, and should equip him for the preparation of a text of as high merit as that at present in review. The author has arranged his book along the logical lines of consideration of diseases as they are apt to occur in the development of the child. Each division is thoroughly considered and shows careful attention to detail in preparation. The chapters on infectious diseases are especially valuable because of the authoritative position of the writer. The book concludes with a few general formulæ which may be useful to the practitioner who is apt to consult these.

DYER.

Roentgen Rays and Electro Therapeutics. By MIRIAN KRIKOR KASSABIAN, M. D. J. B. Lippincott Co., Philadelphia and London.

This volume forms one of Lippincott's New Medical Series edited by Dr. Francis R. Packard. The work is introduced by a practical presentation of the elements of electricity, which is followed by a general discussion of the physiology of electricity. Free illustrations are used to present each subject which materially aid in the interpretation of the text. The author seems thoroughly at home in his discussion of the Roentgen Rays, not only as applied to the therapeutics of disease, but of their usefulness in the diagnostic method. Considerable space is given to the technic and clinical application of the rays. A notable chapter is the one on Application of the X-Ray in Dentistry; another is that considering the legal status of the X-Ray and its usefulness in medico-legal practise. Special diseases are related and the literature has been consulted as to specific reports of results. The high frequency current method of application and its usefulness received due consideration. Altogether this is a valuable contribution to the works now extant on this division of therapeutics.

DYER.

Text-Book of Diseases of the Skin. By ARTHUR VAN HARLINGEN, Ph. B. (Yale), M. D. 4th Edition. P. Blakiston's Son & Co., Philadelphia, 1907.

It has been some years since the last edition of Dr. Van Harlingen's book, and the present volume differs materially from those which have gone before. The alphabetic arrangement of the text has been abandoned and the diseases are now arranged according to the accepted classification in this country. The work throughout is evidently a development of the personal interpretation of dermatology from the viewpoint of the author, although he is free in his credits to authors who are quoted. No attempt is made at free illustration; methods of description and of differential diagnosis treatment being both clearly presented and in excellent style.

DYER.

A Text-Book of Physiology. By ISAAC OTT, A. M., M. D. 2d Edition. Illustrated with 393 half-tone engravings, many in colors. F. A. Davis Co., Philadelphia.

The author develops his teaching of physiology on the unit cell basis and gradually advances the reader to the various functions of the body. We consider this a consistent method of interpreting the biology of the human individual and probably the clearest way to reach the understanding of the average student. No diagrammatic methods are practised, and the text throughout is a running discussion of each of the physiological principles as applied to the structure of the human body. The illustrations are good and sufficiently numerous to be practical. Altogether the work bears distinct evidences of originality in the method of conception, in the arrangement of the text, and in the discursive treatment of the subject matter.

DYER.

Handbook of Cutaneous Therapeutics. By W. A. HARDAWAY, M. D., LL. D., and JOSEPH GRINDON, Ph. B., M. D. Lea Bros. & Co., Philadelphia and New York, 1907

Few books have been written on the therapy of skin diseases alone, and until now the best of these have been in foreign languages. English texts dealing with the subject have grown out of use as applicable to contemporary practise, so that the book of Drs. Hardaway and Grindon falls in immediately with the demand for such a book.

Considering the handbook itself, we must confess to a disappointment in the necessitous limitation in its scope, for so much of speculative treatment is indulged in by the current essayists that one looks unconsciously for the reflex in the text book. On the contrary, this book aims at a sane presentation of the various methods of practise in treating skin diseases, and it includes a full discussion of the skin therapy as at present found useful. An abundance of formulæ is scattered through the book, and almost all of the commoner diseases of the skin, as well as some of the rarer, find consideration in their treatment.

Altogether this work fills a desideratum and should have a wide circulation.

DYER.

International Clinics. Vols. I, II, III. Seventeenth Series, 1907. J. B. Lippincott Company.

As is well known, this is a quarterly of illustrated clinical lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners, by leading members of the medical profession throughout the world. A feature of Vol. I of the 17th series, 1907, is a summary of the progress of medicine and surgery in the preceding year, chiefly as to treatment.

Volume II contains such articles as "Vaccine Treatment of Infectious Diseases," "Gonorrhea and Syphilis in Infancy and Early Childhood," "The Pathology of Bone Marrow," etc. We remark in Volume III such articles as "Some Practical and Theoretical Considerations Concerning Diabetes," "Mechanotherapy," etc.

E. M. D.

Progressive Medicine. Vol. IX. No. 2. June, 1907. Lea Brothers & Co.

Volume II of the year 1907 of this excellent quarterly digest of advances, discoveries and improvements in the medical and surgical sciences, contains all the progress made up to the date of writing the articles, on Hernia, Surgery of the Abdomen, exclusive of Hernia, Gynecology, Diseases of the Blood, Diathetic and Metabolic Diseases of the Spleen, Thyroid Gland, and Lymphatic System and Ophthalmology.
E. M. D.

Abdominal Hernia. By W. B. DeGarmo, M. D. J. B. Lippincott Company, Philadelphia and London, 1907.

This special work on hernia merits the approval of the profession, as it is a thorough exposé of the subject, important alike to physicians and surgeons. DeGarmo justly describes with comprehensive figures the surgical anatomy of each region: the inguinal, femoral and umbilical. The question of diagnosis, somewhat puzzling at times, is then elucidated with accompanying illustrations of fallacies made.

The truss or mechanical treatment, so often abused and misunderstood, is given ample space and scientifically considered. The treatment of inguinal hernia by gymnastics is minutely explained. The surgical cure then follows, and although but few operations are given, those deemed best are selected. As the author states in his preface, "he has tried to make clear the principles involved in curative measures rather than to suggest any special method." Ventral hernia and the very rare forms of hernia, such as lumbar, obturator and sciatic are briefly mentioned.

Good and profitable advice is offered in the chapter on the so-called medical treatment of strangulated hernia, surgical intervention forming the logical sequence.
LARUE.

The Operations of Surgery. By W. H. A. JACOBSON, F. R. C. S., and R. P. ROWLANDS, F. R. C. S. P. Blakiston's Son & Co., Philadelphia, 1908.

This work of two thousand pages and profusely illustrated is, as Jacobson states, for students of advanced grade and practitioners remote from hospitals. We can certainly recommend it as such. It appears in two large volumes, and although printed in Great Britain with the characteristic spelling, it is edited by Blakiston's Son and Co., of Philadelphia.

The practicability of the work is readily seen by the numerous clinical annotations culled from various sources, not a few from our country. Its distinctive feature lies in the uncommon plan of presenting the subject matter by regions, which Jacobson says he deliberately adopted so that those utilizing this work should study the anatomy of each region at the same time as the account of the operations.

We are pleased to note the names of many of our American confrères mentioned in the text, and especially some from our very midst. Smyth's case of successful ligature of the innominate during the preantiseptic period; Souchon's special operations on the shoulder joint; Matas' original and successful method of treatment of aneurisms; Bickham's laminectomy, and W. M. Perkins' contribution to the N. O. MED. & SURG. JOURNAL (Sept. 1902) on 2,345 cases of spinal anesthesia.

We regret that, through ignorance or error, our Southern confrère, Hill, mentioned in connection with his successful case of suture for stab wound of the heart, should be geographically assigned to Montgomery, Alaska, instead of Alabama.
LARUE.

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J. B. LIPPINCOTT CO., Philadelphia and London, 1907.

International Clinics. Vol. IV. 17th Series. 1907.

E. B. TREAT & CO., New York, 1907.

The Sexual Instinct; Its Use and Dangers as Affecting Heredity and Morals, by James Foster, M. D. 2d Edition.

D. APPLETON & CO., New York and London, 1908.

A Text-Book of Minor Surgery, by Edward Milton Foote, A. M., M. D. *Mortmain*, by Arthur Train.

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Light and X-Ray Treatment of Skin Diseases, by Malcolm Morris, F. R. C. S., and S. Ernest Dire, M. D.

P. BLAKISTON'S SON & CO., Philadelphia, 1907.

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LEA BROS. & CO., Philadelphia and New York, 1907.

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U. S. Department of Agriculture, Bureau of Chemistry; *Bulletin No. 84*, Part III. *Influence of Food Preservatives and Artificial Colors on Digestion and Health.* (Washington, D. C., Government Printing Office.)

Pollution of N. Y. Harbor as a Menace to Health by the Dissemination of Intestinal Diseases Through the Agency of the Common House Fly. A report by Daniel D. Jackson, S. B.

Index to Volumes IX and X of the Transaction of the American Otolological Society. 1905-1907.

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Rabies, by David Sime, M. D. (University Press, Cambridge, 1903.)

Anemia in Porto Rico. Report of the Permanent Commission for the Suppression of Uncinariasis. 1906-1907.

The Correction of Featural Imperfections, by Charles C. Miller, M. D. (Published by the Author at No. 70 State st., Chicago, Ill.)

U. S. Department of Agriculture. *The Lumber Cut of the United States*, 1906.

The Every-Day Diseases of Children and Their Rational Treatment, by Geo. H. Chandler, M. D. (The Clinic Publishing Co., Chicago, Ill., 1907.)

Vacation Memoirs; An Address to the University Medical College Class of 1907-1908, by Falvel B. Tiffany.

Text-Book on Uric Acid and Its Cogeners, by George Abner Gilbert, M. D. 1st Edition. (The Danbury Medical Printing Co., Danbury, Conn., 1907.)

23d Annual Report of the Directors of the New York Post-Graduate Hospital for the Year Ending October 1, 1907.

Transactions of the Fifth Annual Conference of State and Territorial Health Officers with the H. S. P. and M. H. S., Washington, May 29, 1907.

Reprints.

Peritoneal Tuberculosis, by Parker Syms, M. D.

The Sleeping Canopy, by Charles Denison, A. M., M. D.

MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Report of the Board of Health of the City of New Orleans

FOR DECEMBER, 1907.

CAUSE.	White.	Colored.	To al.
Typhoid Fever.....	10	1	11
Intermittent Fever (Malarial Cachexia)	1		1
Smallpox.....			
Measles.....			
Scarlet Fever.....			
Whooping Cough.....	1		1
Diphtheria and Croup.....	1	3	4
Influenza.....	5	8	13
Cholera Nostras.....			
Pyemia and Septicemia	2	2	4
Tuberculosis.....	48	27	75
Cancer.....	14	8	22
Rheumatism and Gout	2	1	3
Diabetes	3	2	5
Alcoholism	5	1	9
Encephalitis and Meningitis.....	3		3
Locomotor Ataxia.....	2		2
Congestion, Hemorrhage and Softening of Brain.....	15	13	28
Paralysis		2	2
Convulsions of Infants	2	1	3
Other Diseases of Infancy	20	5	25
Tetanus.....	4	8	12
Other Nervous Diseases	3	1	4
Heart Diseases.....	55	24	79
Bronchitis.....	6	7	13
Pneumonia and Broncho-Pneumonia.....	32	29	61
Other Respiratory Diseases.....	4	5	9
Ulcer of Stomach.....	2		2
Other Diseases of the Stomach	3	2	5
Diarrhea, Dysentery and Enteritis.....	21	7	28
Hernia, Intestinal Obstruction.....	5	2	7
Cirrhosis of Liver.....	18	4	22
Other Diseases of the Liver	3	1	4
Simple Peritonitis	4	2	6
Appendicitis.....	2	2	4
Bright's Disease	36	16	52
Other Genito-Urinary Diseases.....	2	5	7
Puerperal Diseases	4	3	7
Senile Debility.....	23	12	35
Suicide	5	1	6
Injuries.....	27	19	46
All Other Causes.....	15	2	17
TOTAL.....	411	226	637

Still-born Children—White, 30; colored, 15; total, 45.

Population of City (estimated)—White, 251,000; colored, 90,000: total, 341,000.

Death Rate per 1000 per annum for Month—White, 19.65; colored, 30.13; total, 22.41.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 30.09

Mean temperature 54.

Total precipitation 6.88 inches.

Prevailing direction of wind, east.

*Paullum sepultæ distat meritis
Celata virtus. — HORACE.*

New Orleans Medical and Surgical

Journal.

ESTABLISHED IN 1844.

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MARCH, 1908.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

(Established in 1844.)

Official organ of the Louisiana State Medical Society
and of the
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Destroys Micro-Organisms

New Orleans Medical and Surgical Journal.

VOL. LX.

MARCH, 1908.

No. 9

Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a WRITTEN order for the same accompany the paper.)

Traumatic Epilepsy.*

By E. DENEGRÉ MARTIN, M. D., New Orleans.

We have no subject in medicine to-day more perplexing to both the neurologist and the surgeon than lesions of the central nervous system. There are no definite diagnostic symptoms distinguishing the operable from the inoperable cases, as the etiology of the disease is still a mystery. That many cases are traumatic we do know, and I believe that a large per cent of unrecognized cases are of traumatic origin. It is not my purpose to enter largely into the subject of diagnosis and treatment, but rather to suggest what I believe would prevent the occurrence of many cases. It is not unreasonable to look upon any case of traumatic injury of the skull of sufficient violence to cause temporary unconsciousness as the origin of the future development of epilepsy. This question at once admits of argument and naturally suggests imme-

*Read at the meeting of the Southern Surgical and Gynecological Association, New Orleans, November, 1, 1907.

diate surgical interference. To interfere in all cases would be a serious error, but I do believe that if we could keep a record of all head injuries that the percentage of cases of traumatic epilepsy would be greatly increased, and diagnosis made clear in many of the perplexing instances brought to our notice. What I do want to emphasize is the importance of carefully examining all head injuries, especially wounds of the scalp at the time of the occurrence. It is true that in many instances little or possibly nothing will be detected, but it is equally true that many fractures are overlooked. The wound should be thoroughly cleaned, and if the nature of the injury is believed to be serious enough to cause a fracture, the wound in the scalp should be enlarged and the bone thoroughly exposed to ascertain the presence or absence of fracture; and whereas it does not follow that the presence of a fracture will result in epilepsy, a depressed fracture is likely to and should be operated on at once. It may be argued that the absence of fracture does not insure immunity against epilepsy. Very true, but if all depressed fractures are operated upon I believe many cases will be saved from this terrible affliction. It was believed, until Kocher advanced his theory in 1889, that epilepsy was due to adhesions or cicatrices in the cortex. Kocher, however, believed that these played an insignificant role. He believed epilepsy the result of the intracranial pressure and suggested as the relief of this condition the establishing of a permanent opening. There are two objections to Kocher's method. First, the exposure of an unprotected area of brain surface, which is more or less a constant menace to the comfort of the patient, but not so serious as might be supposed; and the second is the possibility of the return of symptoms due to contraction of scar tissue. This objection seems to have been overcome in many cases by the introducing of a plate of silver or of celluloid. If the old theory is correct, this method is, in my opinion, best; but if, as Kocher believed, the attacks are due to intracranial pressure, then closure of cranial defects with osteoplastic flaps has the advantage, insuring better protection to the brain. Time will only permit me to generalize upon methods, and until the etiology of epilepsy is better known, we can judge by the results of treatment only, and this after the lapse of many years. The following cases in my own practice will serve

to emphasize some of the different phases of the question and the importance to be attached to blows on the head:

CASE No. 1. The first case was that of a boy eight years of age, who, while walking along the street, was struck in the forehead with a piece of shell or brick thrown by another boy. The wound inflicted was just over the superciliary ridge on the right side, was about one-half inch in length and exposed the periosteum. The wound seemed slight, was thoroughly cleansed and dressed; in a few days was closed and apparently well. About ten days after receipt of the injury, the patient developed rather peculiar symptoms. He became very irritable, boisterous and unmanageable, showing signs of great mental disturbance. No convulsions occurred, so far as I could learn. However, the symptoms pointing toward some irritation of the frontal lobe, I determined to open the wound and explore the bone. I found a depressed fragment, about three-fourths of an inch in length and one-half inch in width. The bone was comminuted and depressed possibly an eighth of an inch. A few of the smaller pieces were removed with a small chisel; the other fragments lifted, revealing the dura, which was apparently intact. The wound was closed and dressed. The symptoms subsided at once and the boy made an uneventful recovery. With my present experience, I should always explore a wound of this kind most carefully and determine whether there was a fracture with or without depression. Any fracture is liable to produce Jacksonian epilepsy; a depressed fracture is almost certain to do so.

CASE No. 2. Mr. L., a gentleman 52 years of age, was swinging in a hammock attached to two posts fastened in the ground. One of these, being decayed, gave way and struck him across the head, inflicting a gash about three inches in length, extending over the entire parietal eminence on the left side. The wound, which was an ugly one, was examined at the time, but no signs of fracture were visible. At the time of the injury this man was a prosperous farmer, a man of intelligence and thoroughly able to conduct his business. When he was brought to me, twelve years later, he was in a state almost bordering on stupor, dull of comprehension, scarcely cognizant of his surroundings, and unable to transact business. For several years past he had been having

attacks of petit mal. These attacks were growing more frequent all the time and his intellect duller. With this history before me, I felt that I was dealing with a case of Jacksonian epilepsy. Dr. Van Wart saw the case with me, and, though the history was vague, agreed, from what he could gather as to the nature of the attacks and the muscular twitchings on the right side, that this was a case in which surgical interference would prove beneficial. Accordingly, in August, 1906, I did an osteoplastic resection, lifting a flap covering the left parietal eminence and extending almost to the sagittal suture. On lifting this, I found adhesions to the dura and quite a free hemorrhage resulted. A portion of the osseous flap, about three-fourths of an inch in width and two inches or more in length, was removed. The bone was replaced and the section sutured. This patient made an uneventful recovery, and had but one attack after the operation. His improvement was gradual, but marked, the condition of his mind cleared up to such an extent that he was able to transact his business, and continued so until about ten months after the operation, when he had another attack, and for the two months following had probably a half dozen attacks of petit mal. I cautioned him at the time of the operation that I had not done exactly the operation I should like to have performed, and that there was a possibility that the flap would adhere to the dura, and that he might have a return of some of his old symptoms. Accordingly, he returned to me in April, 1907, and as I was at the time suffering from an infected hand, Dr. Parham very kindly removed the old scar tissue, enlarged the opening and covered the intervening space with celluloid. His recovery from the second operation was also uneventful, and he has had no further trouble since returning home. In this case, of course, it is impossible to judge of the results, but so much was he benefited by the first operation that he voluntarily submitted to the second, and my hope is that as many cases in which celluloid has been used seem to have been cured, he, too, may obtain permanent relief.

CASE NO. 3. The third case is one with most unusual symptoms and the history is interesting.

O. M., aged 8, was brought to me suffering from epileptic attacks, occurring as often as three or four times a day. The

child's mind was completely unbalanced. He was extremely nervous. While awake was constantly moving about; would repeat the same word or sentence continuously; had a wild desire to run towards moving objects, and would spend hours at a time clipping bits of paper. He was absolutely unmanageable, without a particle of judgment or reason, and had to go guarded constantly day and night. The condition was most peculiar. I had seen or read of nothing just like it. The following history of his earlier life, gathered from his mother, is interesting as bearing upon his condition.

She writes:

"It was about the age of four that he received a lick on his head. Little was thought of it at the time, as it was apparently only a flesh wound. We were not with him when the accident occurred, and do not know whether he was knocked senseless or not, but he complained very little of it and was apparently well in a few days. We saw no change in his condition for a year or more, when I noticed the first paroxysm. It lasted only a second, after which he seemed a little stupid. I grew alarmed as this occurred more frequently day by day, and we consulted our physician, who seemed to think there was no occasion for alarm. He believed the trouble probably due to worms or some intestinal derangement. This relieved our anxiety for a while, until I noticed the attacks grew more frequent and gradually a little more severe. We noticed also that he was hard to control and did not improve in some things as he should. I remembered the blow he had received on the head, which was caused by a bull-tongue plow share, which fell from the loft in the barn, a distance of some feet, and struck him upon the head. I felt uneasy about him, believing this might have had something to do with his present condition. We, then, put him under the care of a physician and relative, to whom we spoke of the wound in the head, but he was not able to detect any trouble as a result of this. After watching him carefully, he advised us to take him to a specialist on nervous diseases. We consulted Dr. Bremer, of St. Louis, who gave us absolutely no encouragement, pronouncing it a case of epilepsy and incurable. We told him of the lick he had received on the head, but he attached no importance to this. His opinion, of course, was a great disappointment to us; in fact, worse than death, but we were not satisfied. All this time he was growing worse. We kept him quiet with bromide, when it required at least twelve tablets a day to stop the paroxysms, and he was still restless, never still a minute except when asleep. He grew very little, if any, for two years, but when we moved to Clarksville two years ago he began to grow and his trouble grew rapidly worse. The paroxysms had always occurred during the day only, but as he grew worse they took on an entirely different form, occurring also at night and very severe. Some nights he would have three or four, then maybe miss four or five nights before having any more. During the day he was perfectly wild and altogether unmanageable. His disposition, which was naturally very sweet, unselfish and affectionate, had grown spiteful and cruel, and it was dangerous to leave him with the smaller children. He seemed to have no judgment as to how to play with other children. If we crossed him in any way he grew wild and tried to hurt us, in fact he was like an insane person. But such a thing as reasoning

with him or punishing him was impossible. All we could do was to hold him until he got over his fit of passion or his attention was diverted to something else. We dared not take him any where except to drive, but we finally had to stop this, as he wanted everything he saw, such as sign boards, bits of paper, etc. We advised with nearly every physician in town and they were all inclined to attribute the trouble to the lick on the head. This was encouraging to us to know that it was no real epilepsy and there was a chance for his recovery. We knew that if something was not done for him immediately, we would have to send him away from home, so we took their advice and sent him to you. This is his history as near as I can write before the operation."

On March 23, 1903, Dr. Sam Corley, of Clarksville, Texas, brought the little patient to me, and, finding the condition as stated above, I asked Dr. P. E. Archinard to see the case with me and decide whether, in his opinion, the child would be benefited by operation. After a careful examination, we concluded to keep him under observation for several days, and were fortunate enough to see him in one of the attacks and discovered that it was a case of Jacksonian epilepsy. The convulsive movements began in the face, hands and arms, and then continuing to the lower extremity of the right side, before the attack became general. There was marked motor aphasia. Another noticeable symptom observed by Dr. Archinard was marked weakness of the muscles of the right side. With this history before us, the Doctor decided that we were perfectly justified in doing an exploratory craniotomy.

The operation was performed on the morning of March 27, 1903. The scar resulting from the injury was located just below the parietal eminence on the left side, and on a line perpendicular to the meatus of the ear. I made a semi-lunar flap, exposing the cranial bones under this scar, where we found a line evidently the result of an old fracture. I trephined with a small antrum trephine, and after removing a small button of bone, enlarged the area with a Debilvis bone cutter, making an opening fully two and one-half inches in length and nearly an inch and a half in width. There were no adhesions to the dura, and examination of the membranes, and through them the cortex, did not warrant further exploration. The skin flap was replaced in position with interrupted sutures. The child was sent back to his room, and, with the exception of one paroxysm the night of his operation,

his recovery was uneventful. The improvement seemed to be almost immediate.

On December 8, 1903, his mother writes:

"Since the operation he has had two paroxysms, one while in the Sanitarium, and one the first night after he arrived home. Since then he has not even been threatened with one that we have ever seen. We still give him bromide every day. He goes to Sunday school every Sunday and says the golden text as well as any of the children; also stands up and sings for dear life. Then when he comes home he tells me all about his lessons and what songs they sang. We have taken him to church several times and his behavior was perfect. He plays all day with the smaller children and has never had any of those wild tantrums since he came home, but he has bad days and good days. Some days he is not any more care than the other children, then again when he feels bad he is real cross and irritable. Of course he is by no means well, but those most horrible paroxysms have stopped and there is such a wonderful improvement that we feel very thankful for this, though he still gets excited when he talks, and since the operation he has not been so healthy and robust, more subject to colds, and has had one or two little attacks of malaria, with some other trifling derangements that are scarcely worth mentioning."

Every few months I have received news of the little fellow, which has been most encouraging, and several months ago I received a letter written by himself. I have also learned, through Dr. Corley, that the child's condition is almost normal and his improvement has been, in his opinion, marvelous. He tells me that only a short time ago he heard him recite a piece of poetry in public, and it was done as well as any child of his age could do.

On May 4, 1907, I received the following letter from his father:

"I am sorry that I have not been able to take Ona to New Orleans, but hope to make the trip some time this year. My children had the measles in March, and just as they were getting through with the measles they contracted whooping cough. All are just now getting over that, and Ona has complained quite a lot of his head, said it hurt him where he was operated on. He complains mostly after a hard coughing spell. He might have had headache, nevertheless we thought we would tell you about it. We were talking about New Orleans a few days ago and asked him about Miss Miller, and he wanted to write to her at once; so I am enclosing you his letter, which you will please forward."

The letter is quite long, well written, and the spelling is good, and would be just such a letter as you would expect of a child of less mature years.

In reporting this case, I feel that his condition having escaped the notice of a specialist, who believed that it was absolutely hopeless, that similar cases may exist, and wherever there is doubt, an operation would be justifiable, as there is little danger attending it. The case has certainly been remarkable from every standpoint.

Epileptics in Schools of All Grades, Universities Included.

By EDOUARD M. DUPAQUIER, M. D., New Orleans, La.

Since the physical defects of children and youths at school have engaged the attention of educators, it was but natural that they should, also, study the moral and mental deterioration of that most interesting class of society: the school-boy, the school-girl, the college youths, the university students.

Not long ago, it has been broadly spread about the world, that there were more epileptics among school children of all ages than it was commonly supposed. But, it now looks as if this statement was more the expression of an opinion than that of a positive knowledge on the matter.

As to the mental anomalies of children, one must guard against exaggerations. While it is certainly regrettable that one should not discern epilepsy where it conceals itself under a mask, it is, indeed, just as sad to perceive it where it does not exist at all. From the viewpoint of pedagogy, such sad mistakes give rise to serious inconvenience, because the very ones that are most intent and bent on meeting epilepsy everywhere, at every turn, are precisely pedagogues and psychologists who know naught of clinical science and are totally unable to interpret soundly the significance of morbid symptoms.

These words are from Dr. Geo. Paul-Boncour, ex-Interne of the Paris Hospitals, Physician of the Biologic Service at the Th. Roussel school. In some original research on the subject he had already made his mark as the author of a book entitled "*Les anomalies mentales chez les écoliers*"; so, he may be regarded as a competent adviser in this matter. Therefore, the writer submits here an abstract of Dr. Paul-Boncour's ideas, expressed in a recent article, in the "*Progrès Medical*", under the caption of original research, "*Le caractère épileptique chez l'enfant et l'écolier; sa valeur et sa nature*," with the view of making comments and suggestions, on this subject, relative to peculiar conditions existing in our American schools.

Whatever may be the form of epilepsy, epilepsia gravior, *le haut mal*, epilepsia mitior, *le petit mal*, or any variety of epilepsia larvata, masked epilepsy, there are always two periods in the

course of the disease, namely: The first, the paroxysmal period; the second, the inter-paroxysmal period.

The paroxysmal period or fit, itself, comprises three parts: pre-paroxysm, convulsion or its substitutes, post-paroxysm. In the pre-paroxysm part occur: disorders of mobility, tremors, excessive excitability, impairment of speech, etc. In the post-paroxysm part occur various disorders of intelligence, amnesia, mental debility, etc., which are of variable duration, but, may become lasting and permanent, if the fits take place at short intervals; and, in this event, the outcome is either imbecility or idiocy. Thus, nothing but the disappearance of or the long intervals between the fits can ameliorate the mental debility belonging to the post-paroxysm part.

When the continued or prolonged fits do not occur, then begins the inter-paroxysmal period. In other words, the child resumes his habitual physiognomy and feels naught of the effects of the explosion; and here is the place for the question: Does the child at this time (the inter-paroxysmal period) present symptoms that allow to affirm the existence of epilepsy?

It is customary in most of the books to treat of the permanent state of epileptics, setting the disorders corresponding to that state in opposition to those of the paroxysm. This is very well, provided one separates those disorders which are intimately connected with epilepsy proper from those which, on the contrary, are super-added to and may exist independently of epilepsy proper. Among the latter, we notice one which has been incorrectly called the "*epileptic character*".

The value and nature of this so-called epileptic character demand attention from the educational point of view. Some writers after describing *the symptom*, accept it as such, without any reserve or comment, and that is certainly a mistake; others do make a few restrictions, but most of the time, so timidly, that confusion is not eliminated. What is wanted is to bring to a focus the nature of the so called epileptic character in order to interpret its manifestations in the proper light.

Here is what is meant by epileptic character, according to the authors: Its essential feature is exaggerated excitability giving rise to sudden changes of emotion and to impulsions as violent as

they are sudden. The young epileptic is taciturn, selfish, spiteful, irascible, stubborn, quarrelsome, dissembling; he weeps and laughs on the least provocation, lacks coherency in his conduct and thoughts; he delights in destruction, loves to hurt, seeks to torture animals as well as his own chums. Perpetually in motion, he is capricious; as a rule, his presence at home is intolerable; he disturbs the quiet and happiness of the family circle.

With no exception, the authors are agreed as to the constituents of the epileptic character, but none will please tell us the precise physiognomy of this epileptic character, nor give us the means of diagnosing it. Among those authors who believe in its existence a wide difference occurs when it comes to the point of determining the exact value of the epileptic character. To accept the picture given above as pathognomonic of epilepsy is absurd. That a child who has epilepsy frequently shows the disposition referred to as epileptic character is granted. But how many children who are simply neurotics and not at all epileptics show much, if not all of that very same disposition? Here is the point: Instability in mind and body, neuropathy, epilepsy are branches of the same family tree. Not two branches of a tree are alike. While they co-exist on the same ground in a bunch, they differ; they are not identical. So it is with instability, neuropathy and epilepsy; while related, and possibly co-existing in the same individual, they are by no means identical, they must be separated and recognized, each in its nature.

In other words, a child is not epileptic because he is instable or neuropathic. He must have some sign of paroxysmal epilepsy in some of its varieties to be called epileptic. If we were to accept the ideas of certain pedagogues, we would too often make the serious mistake of branding as epileptics a very large number of irascible and unruly children.

The criticism herein expressed, of the current ideas regarding the epileptic character, can be summed up in the following words: instead of using the term epileptic character as a portent of epilepsy, it were better for the sake of clearness and distinction, to express it in this manner, viz.: disposition of children who *have* epilepsy.

Ambiguity in words is certainly the stamp of shaky diagnosis.

Dr. Paul-Boncour renders a great service to all concerned in demanding to focalize the interpretation of a child's disposition.

It is vagueness itself to use such words as "inherited epileptogenous disposition", to explain excessive nervousness in the young, who never had the slightest manifestation of the pre-paroxysm, paroxysm, post-paroxysm parts of epilepsy, in some form. We must be able to connect any of the features of the so-called epileptic character with signs of epilepsy to look upon a child as an epileptic.

If educators, or those who have children in charge, understood their duty, they would endeavor to teach a diagnosis, as soon as any of the features of the epileptic character they have heard of, presents itself in a marked manner.

I venture to say that they are incompetent to do so unassisted. They must seek the advice of a medical man, and no one is better posted on the child's real disposition and family history than the plain, every day family physician of good standing.

I do not mean to say anything to hurt the feelings of anybody, but, writing for the sake of truth, I put the question, were it not safer to beware of "experts" in connection with such cases? My answer is, yes.

As a plain physician, without great pretensions as to knowledge in pedagogy and psychology, I submit the following:

A fact that should be impressed upon those who are concerned in schools and universities is to find out if acts of severe violence in "games" (a word for hazing) are not traceable, in individual cases, to impulsions related to epilepsy.

In plainer words, is not he, possibly, a true epileptic, the promoter of and chief actor in cruel hazing, torturing hazing, beyond the limits of the humane fun and joke which we all enjoyed so much when we were at school?

That question can best be answered by having the family physician called in, and, if any of the pre-paroxysm, paroxysm, post-paroxysm signs of epilepsy is admitted to exist, in the personal history, *surely* the tormentor of his chums *is* an epileptic. Otherwise it is wilful murder at times.

Thus, in the case of epilepsy, the treatment is indicated at once,

and it should be carried out most strictly, in lieu of punishment. This is suggested as a remedy for the disease "hazing", meaning the cruel, cowardly hazing, that leads to permanent injury or even death.

Presentation of a Case of Jacksonian Epilepsy.*

By L. L. CAZENAVETTE, M. D., New Orleans.

In presenting to you, tonight, this patient, I shall not burden you with a lengthy paper on the subject of his affliction.

It is my purpose to adhere closely to the subject at hand. I therefore beg of you just a few moments attention.

By the term epilepsy is meant a chronic disease of the nervous system, characterized by attacks of loss of consciousness, with or without convulsions.

To those attacks of sudden unconsciousness without convulsions are given the name *petit mal* in contradistinction to that of *grand mal* or *haut mal*, given to the severe form of the disease, where loss of consciousness, tonic and clonic convulsions constitute the main picture of the seizure.

There are also a number of cases where the convulsions are localized and where unconsciousness is not the initial symptom but comes on after the convulsive seizures. To this class of cases has been given the terms: epileptiform attacks; Jacksonian or cortical epilepsy. They are due to some localized irritative lesion in the motor cortex. The patient at hand belongs to this class.

HISTORY CASE OF ARTHUR JACKSON—Patient, Arthur Jackson, is a colored male, 18 years of age. He came to the nervous out-cine on Nov. 23, 1907. He complained of having had very frequent attacks of fits during the past several years and was determined to submit to anything that might offer him some relief.

FAMILY HISTORY—Father, living, 53 years, well. Mother, living, 47 years, well. Has 5 brothers, all living, well. Has 3 sisters, all living, well. No history of alcoholism, tuberculosis or nervous diseases in the family.

PERSONAL HISTORY—Native of this city. Normal labor at birth. Began to walk when 10 months, and to speak when a little over a

*Read at Meeting of Orleans Parish Medical Society, January 25, 1908.

year. Has had measles and whooping cough. Was considered a normal child in every respect until he met with an accident on Sept. 24, 1895—was then 6 years old.

While playing in an empty lot was kicked on the forehead, left side, by a horse. He walked to his home a distance of half a block, was not unconscious but bled profusely from the wound, was taken to the Charity Hospital where, after removing fragments of bones, his wound was dressed.

He left the Hospital two months after the injury, was able to walk and use both hands but had almost completely lost the faculty of speech. It was only a year after the injury that he began to speak a little.

He has never gone to school, but has been taught the alphabet and numerals. Mentally, he is very weak-minded.

PRESENT ILLNESS—Began about 2 years after the injury and consisted of sudden involuntary movements in the right hand. He would of course drop anything he had in it, and would not be able to account for it.

After awhile these spells were followed by some unconsciousness, which would last but a very short space of time. In the course of about a year these attacks became more severe and more frequent.

He has had as many as 8 and 9 in one day. Has remained occasionally a couple of weeks without any. He has had them off and on ever since. Has received bromide treatment, but apparently without benefit.

HISTORY OF ATTACK—He was seen during an attack on Tuesday morning, Nov. 25, 1907. While sitting on a chair, there appeared a sudden twitching in the fingers and wrist of the right hand. Got up. On his countenance could be seen a sense of fear. He made a few steps and fell to the floor. Unconsciousness was complete. There again was noticed twitchings in right hand and right side of face, also in right foot. Suddenly there was a tonic contraction: stiffening of the whole body. Head and eyes were drawn to the right side. The pupils were dilated, and did not respond to light. Loss of conjunctival reflex. (Has on frequent occasions passed urine involuntarily during this stage.)

Then began clonic movements consisting of violent jerkings of all the muscles. Presently these jerkings were noticed in the eyes

still drawn towards the right side, also in the muscles of right side of face, right arm and right hand. Leg and foot on right side were not as severely affected. There was no froth from mouth, no biting of tongue.

Then followed a period of profound sleep. After waking up had difficulty in walking because of weakness in right foot and leg. Could not use right hand at all.

EXAMINATION—Muscles are fairly well developed, except those of the right arm and forearm. These are smaller on the right than on the left. Undeveloped movements are normal, except those of flexion and extension of the wrist and fingers on the right side. Movement of flexion and extension of right foot a little weaker than those on left.

Sensation to touch and pain normal.

Reflexes are absent, patellar, Babinski sign absent; plantar reflex present. To summarize we have the following interesting facts:

Normal child until the age of six years; then severe accident: Kick of horse, resulting in fracture of frontal bones on left side, operation and two months' treatment in hospital. Child remained speechless for one year following accident. Regained speech gradually and steadily; then attacks of involuntary movements in right hand, two years after injury; at first not accompanied by unconsciousness, then subsequent epileptiform attacks, with convulsive movements always beginning in the right hand. Paretic condition of right hand getting worse after each attack.

HISTORY OF ATTACK—The symptoms as related above, together with the history of the case, pointed, undoubtedly, to some focal lesion on the left side of the brain, about the cortical region, controlling the movements of the hand.

He was therefore referred to Dr. H. B. Gessner for operation. Operation was performed on December 3, 1907. A piece of bone, measuring $1\frac{1}{2}$ inches in length by $\frac{1}{2}$ inch in width, was found under the dura, over the lower portion of the anterior, ascending frontal convolution.

HISTORY OF CASE SINCE OPERATION—I here wish to add a few words and say, that since the operation, I have been told by the parents of this boy, that he has had several spells. The first was two weeks after the operation and the last was on January 21, 1908, five

weeks afterwards. Between these he had series of light spells. I am sorry not to have seen him in any of these, but am told that they were not as frequent and severe as formerly.

I have purposely presented him tonight because he has, so far, not been given any internal treatment. The reason for that was to know just how much good had been accomplished by the operation. We learn that the spells have returned. But it is to be hoped that now that the physical cause has been removed the result of the Bromide treatment, which will be instituted, will be much more satisfactory. These cases, at best, offer little encouragement, but as it is known that the tendency here is in all respects progressive, it was thought best, even after such a long period of time after the injury (12 years), to give the patient the benefit and to operate.

The findings at the operation proved its necessity. In fact, had it been done years ago we might expect better results. Whatever these may be, I intend to present in a short report to this Society at some future time.

The Ophthalgo-Tuberculin Reaction in the Diagnosis of Tuberculosis.*

By C. C. BASS, M. D., New Orleans.

Only a few months ago Von Pirquet made use of the fact that following vaccination in a patient previously successfully vaccinated, there occurs a definite reaction in a few hours, consisting of itching, irritation, and in fact a characteristic lesion. He tried "scratching in" tuberculin and found that those having tuberculosis show a quite characteristic reaction. This constitutes the cutaneous tuberculin reaction of Von Pirquet.

Wolff-Eisner, in discussing the Von Pirquet cutaneous reaction, said he had found that a ten per cent. solution of tuberculin caused a similar reaction when applied to the mucous membrane, especially that of the eye. The reaction seemed, however, too severe to be of service in diagnosis.

Calmette, profiting by the foregoing, used a 1 per cent. solution of a specially purified tuberculin, and made his first announcement

*Read at the Meeting of the Orleans Parish Medical Society, January 25, 1908

of his ophthalmo-reaction in June, 1907, reporting 25 cases. In 16 tubercular patients, the reaction was positive and in 9 non-tubercular, it was negative. Since then the reaction has been studied by many observers, chiefly in France and, later, in England. So far as I know, Baldwin, of Saranac Lake, was the first on this side to publish on the subject. His splendid and comprehensive article appeared in the journal of the A. M. A., December 14, 1907.

I have had some experience with the new test and thought it of value to call attention to the subject and report the observations so far made. A 1 per cent solution of specially purified "old" tuberculin is instilled into the eye. In from three to twenty-four hours there occurs itching, a scratchy feeling, lacrimation and more or less redness and edema of the inner canthus, caruncle or lower lid, which may include the entire conjunctiva, and be accompanied by fibrinous or fibrino-purulent secretion. These symptoms may last from a few hours to four or five days. There is little or no discomfort or disturbance of vision. There are many grades of reaction. I have adopted, with slight modification, the scheme for recording and grading the reaction advised by Baldwin.

- Negative; no difference in color.
- | Doubtful; only slight difference in the two eyes.
- + Positive; distinct palpebral redness.
- ++ Positive; ocular and palpebral redness, with secretion well marked.
- +++ Positive; deep injection of the entire conjunctiva with edema of lids, photophobia and secretion.

My observations include only 64 cases, and though the test has seemed to make some errors in my hands, on the whole it has seemed fairly satisfactory. I feel that with wider experience, both in making the test and in interpreting the significance of the reaction, it will be of much service to me in diagnosis and possibly in prognosis and treatment.

My 64 cases include 22 supposedly normal individuals, to see if the reaction was likely to occur in them and mislead us. Thirty-four cases were in Prof. Elliott's service, in the New Orleans Charity Hospital, and one was Dr. Allen's case, in the same Hospital. All the others were outside. For much assistance in recording and tabulating the hospital cases I am indebted to the Resident Student, Mr. Levy. I am also indebted to Dr. Lemann for observing these cases during my absence.

TABLE OF OBSERVATIONS.

Number.	Family History of T. B.	Previous Evidence of T. B.	Age.	Initials of Patient.		Reaction.
1	—	—	1	B.C.	Normal.	—
2	—	—	6	J.B.	do.	—
3	—	—	22	Z.C.R.	do. Diarrhea 10 years. Went west. Recovered	++
4	—	—	32	M.N.T.	Incipient Tuberculosis, diagnosed by X-ray.	—
5	—	—	49	T.M.	Normal. No evidence or history of tuberculosis.	+
6	+	—	21	J.C.B.	Normal. No evidence or history of tuberculosis.	+
7	+	—	18	M.P.	Tubercular adenitis	+
8	+	—	..	'..	Normal.	—
9	+	—	..	J.L.	Colon bacillus pyelitis.	—
10	—	—	..	D.C.	Normal	—
11	—	—	39	J.C.	Chronic diarrhea, 9 years.	+
12	—	—	..	A.A.W.	Tubercular spine, X-ray diagnosis.	—
13	+	—	62	J.M.	Cirrhosis of liver. Meningitis when a child.	+
14	+	+	29	C.B.	Normal. Scrofula when a child.	+
15	+	+	30	B.E.E.	do. White swelling when a child	+
16	+	+	14	N.P.	do. Scrofula as a child.	++
17	—	+	49	J.C.	do. Hip disease in childhood.	+
18	+	—	..	M.R.	do.	—
19	+	—	..	M.F.	do.	—
20	+	—	..	M.R.	do.	—
21	—	B.	do.	—
22	—	—	45	E.S.	Cirrhosis of the liver.	—
23	—	—	21	C.D.	Acute enteritis.	—
24	—	—	47	F.M.	Ch. morphinism. Ch. enteritis 2 yrs. No bacilli found.	++
25	—	—	27	B.B.	Convalescent typhoid.	+
26	—	—	10	H.G.	Pulmonary tuberculosis. Bacilli found.	+
27	—	—	31	g.z.	do. and laryngitis.	+
28	—	—	20	H.B.	Typhoid fever.	—
29	18	N.N.	do.	—
30	—	—	30	T.S.	Pulmonary tuberculosis. Bacilli present.	++
31	—	—	35	B.S.	Tuberculous ankle.	—
32	—	—	60	H.N.	Cirrhosis liver.	—
33	—	—	31	P.K.	Typhoid fever.	—
34	—	—	18	G.P.	Multiple neuritis.	—
35	—	—	45	D.M.	Ch. Alcoholism.	—
36	—	—	26	P.M.	Hypochondriasis.	—
37	—	—	37	F.G.	Acute alcoholism. Conjunctivae already injected.	+
38	—	—	37	J.A.	Pleurisy and ch. bronchitis.	—
39	—	—	53	L.A.	Pulmonary tuberculosis, febrile.	—
40	+	—	40	J.D.	do.	++
41	—	+	44	L.H.	Neuritis. Had pulmonary tuberculosis 6 years ago.	+++

TABLE OF OBSERVATIONS—Continued.

Number.	Family History of T. B.	Previous Evidence of T. B.	Age.	Initials of Patient.		Reaction.
42	—	—	..	J.I.	Pulmonary tuberculosis, febrile.	+
43	—	—	..	F.S.	Acute articular rheumatism.	—
44	—	—	23	L.L.L.	Normal.	—
45	+	—	32	C.C.B.	do.	—
46	—	—	..	J.S.	Asthma and tropical fever.	—
47	—	+	39	J.T.	Uncinariasis.	—
48	—	—	29	E.T.	Asthma.	—
49	—	—	..	B.	Normal.	+
50	—	—	..	290	La grippe.	—
51	—	—	..	287	Edema of feet.	—
52	—	—	..	275	Rheumatism.	—
53	—	—	..	276	Lagrippe. No evidence or history of tuberculosis.	+
54	—	+	..	288	Nasal catarrh 20 years.	—
55	—	—	..	268	Pulmonary tuberculosis. Moribund.	—
56	—	—	..	257	Diarrhea 6 weeks.	—
57	—	+	..	294	Uncinariasis.	—
58	—	—	..	294	Asthma.	—
59	+	—	12	E.Q.	Tuberculosis periostitis.	—
60	+	—	..	N.	Normal.	+
61	+	—	..	R.	do.	—
62	+	—	..	M.	do.	—
63	—	—	..	W.	do.	—
64	+	—	13	B.C.	Periostitis following injury.	—

Of the 64 cases, 11 had been diagnosed clinically tubercular or probably tubercular. In 7 tubercle bacilli had been found and all gave positive reactions, except one moribund case. Of the remaining 4, probably tubercular, 1 gave positive and 3 negative reactions. These were case 31 (clinically tuberculosis of ankle, was diagnosed by me over a month ago, on the opsonic index probably non-tubercular. A streptococcus was isolated from the lesion, patient was given streptococcus vaccine and tuberculin. He rapidly improved until a few days ago, when he suffered a relapse.

Case 4 was diagnosed by X-ray tuberculosis of lung. Physical signs indicated trouble in right apex, no bacilli found.

Case 12, diagnosed tuberculosis of spine by X-ray.

Of the 53 supposed non-tubercular cases, 22 were normal individuals, and 31 other disease, as follows: Typhoid fever —, asthma —, neuritis —, diarrhea —, alcoholism —, uncinariasis and cough —, cirrhosis of the liver —, hypochondriasis —, and chronic morphinism —, and pyelitis 1. Of these latter — gave positive reaction.

Forty-one neuritis; had pulmonary tuberculosis six years ago, bacilli found, discharged after two months in tuberculosis hospital in Baltimore; well ever since.

Twenty-five convalescent typhoid; no evidence or history of tuberculosis.

Thirty-seven alcoholism; slight reaction; no history or evidence of tuberculosis.

Twenty-four chronic morphinism; had chronic diarrhea past two years; no bacilli found.

Three chronic diarrhea, nine years; no bacilli found.

Thirteen cirrhosis of the liver; emaciation, meningitis when a child.

Of the 22 normal individuals, only 7 gave positive reactions.

Fourteen scrofula, 20 years ago; reaction marked.

Fifteen white swelling, 24 years ago.

Sixteen scrofula, 4 years ago.

Seventeen, hip-disease when a child.

Sixty, no history of tuberculosis, but mother died of it.

Forty-nine, no history of tuberculosis.

Three, chronic diarrhea, 10 years ago; went West; recovered.

CONCLUSION—(A) The reaction is an immunity reaction, being an expression of acquired immunity, and may occur in healed cases and fail in moribund cases. (B) It occurs in a large per cent, if not all cases of tuberculosis. (C) It occurs in a few, if any, non-tubercular cases, barring healed cases. (D) It certainly seems the best method of using tuberculin for diagnosing tuberculosis yet suggested. (E) Calmette's original claims seem wholly justified.

They are:

1. It is absolutely safe.
2. It is so easy of application that anybody can carry it out.
3. It produces no constitutional disturbance, and locally only a slight ocular disturbance and lacrymation.
4. It is as accurate and delicate as the hypodermic method.

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P. L. Thibaut, M. D., Chairman.

Opsonins and Vaccine Therapy.

By DR. O. C. BASS, New Orleans.

In this paper it is proposed to briefly explain (1) opsonins, (2) opsonic index, (3) bacterial vaccines, and some of their applications in (4) diagnosis, (5) treatment, and (6) prevention of bacterial diseases and, (7) to suggest a short and simplified technic for determining the opsonic index.

(1) **OPSONINS:** Opsonins may be defined as a substance or substances in the body fluids which have the property of preparing bacteria and certain other bodies to be phagocytized. The following three experiments give a clear conception of their existence and known function:

1. Washed leucocytes plus an emulsion of bacteria; incubate any length of time; no phagocytosis occurs.

2. To a similar mixture of leucocytes and bacteria, add some blood serum; prompt phagocytosis occurs. With some bacteria, some of the staphylococci for instance, many of the leucocytes, even after 8 or 10 minutes incubation, will be found so packed with staphylococci that they cannot easily be counted. Plainly the serum exerted an influence either on the leucocytes or on the bacteria, which controlled the phagocytosis. The next experiment shows the effect to be on the bacteria and not on the leucocytes.

3. Add serum to the emulsion of germs; after remaining a few minutes wash them thoroughly so as to remove the serum. Now mix these "prepared" bacteria with washed leucocytes and phagocytosis occurs as before. The bacteria have, therefore, been prepared for phagocytosis by something in the serum. This something, Wright calls opsonin from the word *opsono*—I prepare food for.

It is not now clear whether there exists a different opsonin for each bacterium, *i. e.*, whether they are specific or general.

One thing is apparently established, viz., that with only rare exception, there is no phagocytosis of bacteria without previous proper opsonification, and that phagocytosis is greater or less, according to the amount or the potency of the opsonins present.

(2) **OPSONIC INDEX.** Opsonin cannot be isolated from the serum, therefore it cannot be measured by weight or volume. It has been found that the amount in the serum of different normal individuals is approximately the same and does not vary from day to day. This fact is utilized in estimating and expressing the amount present in a given case.

To Leishman belongs the credit for having devised a technic by which opsonins may be estimated. Briefly stated it is as follows: Equal quantities of washed leucocytes, emulsion of the bacteria used and the patient's blood serum are mixed in a small pipette and incubated for a definite length of time, say 15 minutes. Another specimen is run through in exactly the same manner, but using the serum of a normal individual or preferably the mixed sera of several normal individuals. After incubation a smear of each is made on slides and stained. The average number of bacteria per phagocyte is ascertained by counting those in several polynuclear leucocytes. The opsonic index is calculated by dividing the average number of bacteria per leucocyte in the patient's serum specimen by the average number in the normal serum specimen. An opsonic index, then, expresses in figures how many times the normal amount of opsonins the patient's serum contains.

If we remember that phagocytosis rarely occurs without the presence of opsonins, and that phagocytosis is governed entirely by the amount of opsonins present, we see that the opsonic index practically expresses in figures, when coupled with a consideration of the number of leucocytes, the phagocytic ability of a patient to the particular bacterium used.

It is needless to emphasize the importance of phagocytosis in the resistance of the tissues against bacterial infection and disease. Though other factors must figure in the process, unquestionably phagocytosis is of extreme importance. Besides this, the various other antibodies are probably a product of the tissue cells and may it not be that agglutinins, bactericidal and bacteriolytic substances, antitoxins, etc., are increased or diminished by the same influences

as the opsonins and vary in amount and potency as opsonins vary. If this is true, the opsonic index is also an index of these substances, or in other words, is an index of the patient's total resistance. Further, anything that would increase the opsonic index would also increase their index as well, and the index of his total resistance. Some more work along this line is needed.

(3) BACTERIAL VACCINES: Bacterial vaccines are dead bacteria sterilized by heating for the shortest time, and at the lowest temperature by which they are killed. They are standardized so a given quantity will contain a known number of bacteria, except tubercle vaccine in which we measure the dose by weight of bacterial substance. Koch's New Tuberculin, T. R., is generally used. With all other vaccines it is preferable and apparently often very essential to make them from the organisms isolated from the lesions in the individual case. This is called autogenous vaccine. Probably further experiments will furnish us stock cultures that will be applicable to certain classes of cases. I have recently had impressed on my mind the importance of using autogenous vaccines by a case of pyelitis from which a pure culture of colon bacillus was isolated by Dr. Jos. Hume. Three days after the second vaccination this patient's opsonic index to this particular bacillus was 23, while it was 0.9 and 1.3 respectively to each of two other cultures of colon bacillus, one from a chronic cystitis, the other from a case of appendicitis. In all probability, a vaccine made from these other strains would not have given the same results with the original bacillus.

Vaccines are given hypodermically. Only ordinary antiseptic precautions are necessary.

If a sufficiently large dose of a bacterial vaccine is given it is followed by a fall of the opsonic index. This lasts for a variable length of time, according to the size of the dose, and is followed by a rise to and above the starting point, which also varies in duration, but usually lasts a week and often much longer. If the dose be too large or is repeated too often, this primary fall, called by Wright, "the negative phase," will be too great and unduly prolonged. The subsequent rise, Wright's "positive phase," will be delayed and short in duration, or will not occur at all. If proper doses are used, however, the negative phase will be insignificant.

and transitory, and followed by a longer and more pronounced positive phase.

The proper dose of tuberculin ranges from 1/500 milligram to 1/1000 milligram of bacterial substance. Doses of other bacterial vaccines range from ten million to two thousand million, according to the organism.

(4) APPLICATION IN DIAGNOSIS: Sir A. E. Wright and his co-workers have found that in the presence of a local bacterial disease like acne, furunculosis, bone tuberculosis, lupus, tubercular glands, and even in latent pulmonary tuberculosis, the opsonic index is generally below normal. This might be spoken of as lowered resistance, and may have been induced prior to infection, rendering infection possible. One would at once ask if this may not explain what we have been calling lowered resistance to tuberculosis, which we believe may be inherited or acquired.

In systemic bacterial diseases the opsonic index is likely to be very variable, from much below to much above normal. An explanation offered for this is that by irregular absorption of bacterial substances the opsonins may be used up, but the tissues set to work to make an excess to meet this drain, and if no more bacteria are thrown into the blood for a time, this excess shows up in an increased opsonic index. A series of very variable indices then, would indicate active disease. A series of persistently low indices would indicate latent infection if coupled with other clinical evidences. I say a series, because the present technic does not permit of absolutely accurate indices, and we should have large enough number to remove this error as much as possible, usually three or four.

The opsonic index may be of diagnostic value then, and of special value to determine the resistance against infection in exposed individuals or those likely to be exposed. If we remember that 75 to 90 percent of children living in the cities who die from all causes, have tubercle bacilli demonstrable in their lymph glands, the value of being able to recognize those who have low resistance to this disease will be apparent. Especially if, as I shall attempt to show later, we can, by means of bacterial vaccines raise this resistance to or above that of normal individuals.

(5) APPLICATION TO TREATMENT: Our present understand-

ing of opsonins would indicate that only in those infections, generally local, in which the opsonic index is regular and generally below normal, would vaccination be applicable. Irregular indices and systemic diseases indicate over-vaccination already. Such cases may sometimes be changed, however, by rest, the use of such means as increase the coagulation of the blood, as calcium chloride, proteid diet, etc. Nature's protective wall of lymph would thus be strengthened and tend to localize the trouble.

Some of the diseases in which vaccination is now being tried with good report are: Tubercular adenitis, sinuses, bone disease, lupus, genito-urinary tuberculosis and first stage of pulmonary tuberculosis; staphylococcus infections, such as acne, furunculosis, sycosis, etc.; local streptococcus infections; chronic gonorrhea, especially gonorrheal arthritis; colon bacillus infections, especially of the genito-urinary system; pyocyanus suppurative otitis; and micrococcus neoformans in malignant growths. Very favorable results have been reported with tuberculosis and staphylococcus cases.

My own observations have been with tubercle, colon, staphylococcus and gonococcus. I shall not report them in detail yet, as I believe the cases have not been sufficiently numerous to draw conclusions from, nor the time since the apparent cure of cases of tuberculosis and of acne to report them as cures. With colon bacillus the reactions have been signally good, but patients, though probably improving, are not well. A case of acute gonorrhea has not done any better than they may do without vaccination. I may say, though, that I have not treated a single case of local bacterial disease in which I have not been able to raise the opsonic index and keep the average above normal.

The treatment should be controlled by the opsonic index, if possible, for in no other way can the actual effect be observed. Endeavors have been made to find some more easily observed clinical manifestation of the negative phase, but without success; so that at present the opsonic index would seem almost indispensable. Wright insists on determination of the opsonic index immediately before each inoculation and warns against any dependence on clinical symptoms to indicate the negative phase. The rule is to give a dose of vaccine small enough to cause only a short, insignificant

negative phase, and repeat it when the positive phase begins to decline. This will usually be from five days to two weeks.

There are difficulties in the way of any general adoption of the method, since the determination of the opsonic index requires considerable practice and makes large demands on the time of the investigator if any number of cases is concerned.

(6) APPLICATION IN PREVENTION OF BACTERIAL DISEASES:

If we have an accurate index of resistance against an infection and by vaccination can raise this resistance to or above normal, we ought to be able to prevent to some extent the development of such diseases. This ought to be of value in prevention of tuberculosis in susceptible and exposed individuals. I prophesy that we will soon be doing this. In fact, I have such a patient under treatment now. He is apparently perfectly well and has not had anything suggesting the presence of tuberculosis. His father and two brothers have died of the disease. His tuberculo-opsonic index was persistently below normal. It has been easy to keep it above normal by vaccination.

As for the duration of what I am inclined to consider a degree of induced immunity, I am not aware of any sufficient amount of work published bearing on the subject to be conclusive. I have had an observation, however, which I consider suggestive. This is a patient who was treated with tuberculin a year ago with much benefit. After an interval of several months this patient fell into my hands. Several opsonic indices varied from 0.8 to 1.0 or normal. Each of several vaccinations has been followed by a positive phase in twenty-four hours, and the usual negative phase has been absent. This explanation is offered: By the previous inoculations an acquired immunity was established, by which the tissues were trained to promptly make extra opsonins whenever the bacterial substance was introduced. This would probably have occurred had living tubercle bacilli been introduced into the system and possibly have prevented their growth. If this explanation is correct, some of the immunity has lasted over six months. In another case, in which a man had typhoid fever seven years ago, his typhoid opsonic index was normal on three successive days. Following vaccination with 200 million dead typhoid bacilli, which would have ordinarily produced a prompt negative phase, in twelve hours his opsonic index was 1.5 and in twenty-four hours it was 4.2. The same ex-

planation as offered in the previous case would seem as plausible in this one. That is, that the repeated self-vaccinations during the course of the disease educated his body cells to manufacture antibodies as soon as the bacterial substance was introduced, and thereby he has remained immunized to typhoid bacilli for seven years, and probably will be through life.

Prof. L. Hektoen has recently emphasized the idea that probably scarlet fever would be a very benign disease but for the secondary infection by the streptococcus pyogenes, and suggests that prompt immunization by vaccination against this organism of patients exposed to the disease might render most cases of scarlet fever benign.

(7) SIMPLIFIED TECHNIC: In conclusion I wish to offer a technic, original with me, by which anybody, conversant with the use of a microscope and blood counting, can determine the tuberculo-opsonic index with fair accuracy and without the facilities of a well equipped laboratory, as the Leishman technic requires. It will probably be as applicable with other bacteria if we can preserve them as well.

Any bacteriological laboratory can furnish an emulsion of dead tubercle bacilli in 1.5% sodium chloride solution, to which is added 1% sodium citrate to prevent coagulation of the blood and a drop of chloroform for preservative. This keeps well. Before use shake the bottle well and allow the clumps to settle. Without shaking again, this may be used for a day or two. A little experience will demonstrate the appearance of a proper emulsion. Stick the finger and squeeze out a good drop of blood. With a small pipette take up an arbitrary measure of emulsion and same amount of blood. Mix by blowing back and forth a few times. This may be incubated in an inside pocket in a warm room or by the side of the patient in the bed for half an hour, or more or less. At the same time run through one or more other preparations, using blood of normal individuals, incubating same way and same length of time. Now blow each out on slides, make a smear and stain by Gabbett's method. Count number of bacilli in 50 or 100 polynuclear leucocytes. Get average and divide average in patient serum specimen by average in normal serum specimens. Result is the tuberculo-opsonic index.

Reference to the recent literature on the subject will be found in the *Journal A. M. A.*, May 6, 1907.

A Report from the Anti-Tuberculosis League to the State Medical Society.

By DR. E. L. MCGEEHEE, SR., New Orleans.

At a meeting of the American Anti-Tuberculosis League in Atlanta, Ga., two years ago, this month, Dr. Quitman Kohnke and I were appointed vice-presidents and given this territory of Louisiana to enlist in this great life-saving work, organized for the prevention of consumption; to educate the people that this is a preventable disease; to secure State aid for poor consumptives; to establish hospitals. Abortive attempts were made at different times by physicians to organize a League in our State, but every physician was too much engaged in his duties as physician to do his duty as a sanitarian.

PHYSICIANS AS SANITARIANS.—Dr. George A. Lopez has said physicians have not measured up to the need of the public in giving authentic sanitary information, and ascribes the causes first due to the fact that the medical universities fail to teach in adequate manner sanitary science and preventive medicine; and, second, that physicians fail to recognize their importance as sanitary teachers. It is a great work to pull a man out who is in a hole. But it is a greater work to prevent a man from getting in the hole.

On November 25, 1906, the Women's League of New Orleans turned their attention to the subject with characteristic earnestness and determination. Truly, the daughters of America are "as the corner stones polished after the similitude of a palace." Not only to smooth and soothe domestic life, the fairest and most useful mission for her queenly virtues is in the upholding of society and protecting it from every foe.

Though the physician should be a domestic medical missionary, preaching the gospel of sanitation, yet the success of organized effort depends upon the co-operation of women.

The Louisiana Anti-Tuberculosis League is the outgrowth of the executive board of the Women's League; to them remains the credit for having pioneered the movement and launching it successfully.

To make this campaign against tuberculosis more widespread is the burden of my message.

Though greatly encouraged by what had been accomplished, we

hope that with the endorsement of the Louisiana State Medical Society the movement will be on a broader and more effective basis.

We desire to lay emphasis on the friendly character of this work, for the motive that prompts it is love for our fellow-men. It is done with the entire absence of officialism or coercion.

It is the experience of everyone interested in medical legislation that, until public opinion is fairly well matured, legislation along any given line is relatively valueless. This will emphasize the value of educating the public concerning the facts that science has demonstrated.

The physician's work is not simply to diagnosticate and prescribe treatment, but to teach and thus prevent disease.

Unquestionably much is being taught by universities and individual physicians of sanitation, but what is needed at this time is *organized*, united effort of the profession.

The lack of this is one reason why the public have not profited more from available sanitary knowledge.

If in our political system we are fortunate enough to have as public officials men of the necessary training and expert skill, which we have, they still need the moral support of the medical profession. The unfortunately brief period of an efficient officer curtails his usefulness. A Sanitary League, freed from political limitation and embarrassments, with progressive policies, is one of the necessities of the future.

This organization would be in position to hang out the red flag of danger, in any anticipated municipal change, as to water and milk supply, and not wait until an avoidable epidemic of dysentery, typhoid, yellow fever or cholera is precipitated upon a community. The value of organization in all important analogous causes is appreciated and employed. May we so change our by-laws as to have a standing Committee on Sanitation?

A result of this permanent comprehensive sanitary commission in the department of public service would give ample time for careful investigation and preparation, and not wait for emergencies to require sudden changes. Another result would be to overcome that innate reluctance to take the initiative that seems to characterize the modest doctor.

As a representative of a sanitary league, his voice would be heard in public schools and before state and municipal conferences on

sanitary questions, when as an individual physician he would be reluctant to speak.

The highest skill and wisdom are none too great to enlist in this cause of public sanitation in making a practical application of sound technical knowledge in order to *prevent* disease and render human life happy, because healthful. New Orleans in yellow fever, as well as New York in tuberculosis, furnish us fortunate examples of efficiency in health administration. The experience in other States of the Union and on the Continent encourage us in united effort.

In the fight against tuberculosis is waged one of the most momentous campaigns in the history of modern science.

Consumption, like death, claims all seasons for its own.

The education department is advancing satisfactorily, through the newspapers and by means of lectures before schools and mothers' clubs.

The fraternal organizations have extended a helping hand.

The physicians, ministers, school teachers and other leaders of thought are helping to promulgate sanitary truth. The secretaries of all parish medical societies have been addressed, asking for formation of branch leagues in each parish.

Sanitary ignorance, not Providence, is responsible for fearful death rate; nearly all deaths are due to ignorance, neglect, self-indulgence, or vice. (Dr. Chaillé.)

Consumption requires germ and favorable soil. We know, but the intelligent public does not. Consumption is communicable, it is a house disease, spread chiefly by sputum. Consumption is preventable—destroy sputum, condemn dust-rag and broom and disinfect rooms, and it will be limited, if not eradicated. Consumption is curable in early stages and preventive means not expensive.

Doctors are to tell truth and diagnose early. Recently seventeen applied in this city for admission into a private sanitarium for tuberculosis, and only three were accepted; fourteen were too far advanced to live in hope of benefiting them. Cases in the third stage are without hope, even in the most approved conditions and treatment.

In the past, when we could offer no hope to a tuberculosis patient, the physician was in some measure justified in reserving his diagnosis, as he is to-day with cancer; but now such a large proportion

of cases in the early stage get well, it is imperative that every physician should be honest with his patient, make an early diagnosis not only for the patient's benefit, but that he may use sanitary precautions, and not be a menace to his loved ones.

Clean bill of health should be held by all who work with others in closed rooms, such as counting rooms, schools, postoffices, factories, etc.

Looking to segregation and to care of indigent sufferers, the chief points to be considered are sanitarium, fresh air, sunlight, cleanliness, good food, rest and pleasant diversions.

Tents or shacks should be arranged in pine woods, primarily for the purpose of demonstrating the curability of tuberculosis in this climate, and incidentally to influence the State to provide sanitariums for the tuberculosis poor.

We understand that tents are erected on tops of houses in Boston.

Large expensive hospitals, where miscellaneous diseases, with tuberculosis, are crowded, are death traps, even though they may be elegantly equipped and managed.

Consumption lurks in the sweetest cup; it hides in the petals of the fairest flower; it nestles upon the lips of innocence and virtue; and it travels upon winds with dust for its wings.

Day and night, and from century to century, its fell work of destruction has been carried forward, and to-day it is the greatest menace that confronts the civilization of mankind.

It is one of those appalling evils that poisons the fountains of human health and converts each additional victim into an active and ghastly focus of infection, from which the malignant death-dealing bacilli radiate continually.

Up to recently it has been dreaded as a withering, inexorable curse of the gods, from the blasting effects of which there was no hope of escape. It meant days of pain and nights of torture to the helpless victim. It meant years of lingering suffering, for which no human hand could give relief, and constantly looking forward to the end of it only at the grave. It was gloomy, it was pathetic, it was terrible, but thanks to the epoch-making Koch, modern research has added brightness to the gloom that formerly enshrouded the picture, and we can promise 90 per cent. of those in the first stage that they will get well. There is now hope for the consumptive.

As the great Nestor of sanitary science in the South, Dr. Stanford E. Chaillé said, this is a holy cause, and will have God's blessing. We cannot separate the interests of the body from the soul. Nothing that afflicts humanity causes more vacant chairs, sad hearts and blighted lives than this preventable disease.

May we not confidently rely upon the assistance of all humanity, and surely the members of the committee, in carrying on this crusade? We ask you to form branch leagues in every parish. We have addressed the secretaries of all medical societies in each parish, and enclosed to them copies of our by-laws and constitution, showing that we are a chartered institution, according to laws of the State. United we can accomplish much more than when working independently. It is an inspiring and uplifting task we have undertaken to perform.

As the *States* says, "it is one of the greatest works in the interests of humanity that has ever been undertaken anywhere, and it deserves the support of every man, woman and child in the State. Humanly speaking, we know of nothing that can compare with it in importance, that would be a more delightful blessing to the human family, than the extermination of consumption. It being a preventable disease, it is a positive crime to neglect the steps necessary to exterminate it from the earth.

FORM OF ACT OF INCORPORATION OF THE LEAGUE.

[The undersigned parties desiring to avail themselves of the provisions of the law of this State relating to the formation of corporations for religious, scientific, literary or charitable purposes, and to acquire and enjoy the rights, privileges and powers of a body corporate and politic in law, they do hereby form themselves into such a corporation and body politic under the name and style, and for the purposes hereinafter specially set forth, viz.:

ARTICLE I.

The name and title of this association shall be The Louisiana Anti-Tuberculosis League.

ARTICLE II.

The objects and purposes of this association are, by uniting into a working League, the greatest possible number of people animated by a common purpose, to combat by every available means, the spread of tuberculosis, to mitigate the ravages of the disease and to aid in providing, as far as practicable, for the proper care of indigent sufferers.

This association shall be strictly non-sectarian, and nothing of a religious or political character shall be introduced into its deliberations and actions.]

DISCUSSION OF PAPERS ON TUBERCULOSIS AND OPSONINS.

DR. WM. M. PERKINS: The subject matter of Dr. Bass's paper appeals not only to the internist, but to the surgeon as well. One of the most striking points in the recent literature of this subject is the theory that the repeated withdrawal of the fluid in tubercular pleurisy tends to lessen the progress of the infection by removing serum with a low index, which is replaced by fresh serum with a normal or high index.

If this theory be well founded, it indicates that whatever tends to remove the serum of any infectious focus, may do good by raising the local opsonic index.

There is one class of surgical cases, abscess of the liver, to which I would like to direct Dr. Bass's attention, with the hope that he may evolve some practical help for the surgeon. Many of these cases go down in the fight against sepsis, in spite of the fact of mechanically satisfactory drainage. It seems to me that some help might be found from autogenous vaccination.

DR. J. B. ELLIOTT, SR.: After reading the first paper on this subject I became an enthusiast. I saw possibilities. I am only too glad this paper has been read in the presence of Dr. Evans, in order that we may be able to ask him a few questions in this direction. It seems to me, from what I have learned through the journals, being too old for microscopic work myself, and having to rely upon the younger generation, it seems to me that we have in this opsonic index an enormous asset for rational treatment, not only in the direction of tuberculosis, but in the direction of all diseases. Dr. Bass just mentioned in his closing words the fact that the secondary infection in scarlet fever can be controlled. We are still unable to check a case of the original disease. For an original poison, such as scarlet fever, we may not be able to take the opsonic index, but we may be able to find a particular germ that causes the secondary infection and causes death, and by eliminating that, be able to save our patient from the disease, which, through other treatment, we cannot touch. I cite scarlet fever because it has been mentioned. but the same is possible in other acute diseases. Think how little we can strike directly at the causes of the acute diseases, and then think of the study of the germ that produces the secondary infec-

tions. We may find thus the germ which produces the fatal results.

I believe we have before us the only method I have seen for a perfectly rational treatment. It is absolutely scientific, and becomes more accurate day by day. Ten years hence I believe it will be the only method of searching out causes of diseases and treating them.

Now I would like to ask Dr. Evans as to what value he would place upon the opsonic study as a means of diagnosis of tubercular diseases. Is it reliable? If so, is it more reliable or less reliable than the tuberculin test.

Further Observation on the Physiological Effects of the Waters of the Hot Springs of Arkansas.

By DR. E. H. MARTIN, of Hot Springs, Ark.

In April I read a paper before the Mississippi State Medical Association on "The Physiological Effects of the Waters of the Hot Springs of Arkansas." Before adding to the observations given therein, it will be necessary for me to give a synopsis of the findings then reported.

1. For the sake of comparison, I first called attention in that paper to the fact that ordinary water, no matter how hot, will cause no rise of temperature in a healthy subject immersed therein. The thermolytic centers guarding against any increase of temperature from conducted heat.

2. I next called attention to the remarkable phenomenon observed when any person is immersed in a bath of Hot Springs water at a temperature even lower than that of the body. The subject's temperature rising very promptly in a few minutes to 101, 102, 103, and even to 105 degrees Fahrenheit, if kept in the bath very long, the pulse increasing in rapidity correspondingly.

3. I explained this rise of pulse and temperature by the very evident increase in metabolism and combustion in the cells of the patient's body. This increase in cell activity being the source of good or evil peculiar to the Hot Springs bath.

4. I offered a simple method of dosing this increased metabolism and keeping it within the bounds of good for any particular case by

the use of the clinical thermometer. First judging from an examination of the patient how great a reaction would be desirable, and directing him to be removed from the tub when his sub-lingual temperature reached that point.

5. The after effects of this increased metabolism were classified as eliminative and constructive, the elimination of the products of combustion and other poisons being evidently through skin, kidneys and liver, and the constructive effect being due to an increase in cell activity in the hematopoietic system.

6. In explanation of these remarkable and peculiar effects, produced by no other water and in like degree by no other agency, to my knowledge, I offered as a working theory the radio-activity of these waters. The links in the chain being the facts that an exposure to the X-Ray increases the metabolism, that the radium ray simulates in every important effect the X-Ray, that radio-active substances have the same effect, to a certain degree, as the salts of radium, and that these waters have been proven by experts employed by the government to be radio-active.

7. Attention was called to and stress laid upon the fact that these are not *hot* baths, that none of the effects obtained depend upon the temperature of the water; that the water being naturally hot is merely incidental, and that the same effects are observed if the bath is given at 94, 96, 98 or 100 degrees; in fact, that the bath may as well be prescribed "comfortable," as to be given at any given temperature, as far as the "Hot Springs effect" is concerned.

In addition to, and as a support to these observations and deductions, it is very evident that exhaustive experimentation should be made on the following lines:

1. To test elimination, it should be determined before the subject takes the baths, using perfectly healthy subjects to get the true physiological effect, the total solids eliminated by the kidneys within twenty-four hours, this to be done on several subjects and on several successive days. Then these subjects should be given the baths, and the total urinary solids determined each day; also, an estimate should be made by weighing the subject before and after the sweat, of the solids eliminated through the skin (the specific gravity of the sweat to be used in making this estimate), and added to the total urinary solids eliminated. This has not been

done, and cannot be done, without great expense, as healthy subjects would have to be employed. The Government, as it owns the Springs, should send Dr. Wylie and his "poison squad" to Arkansas for that purpose.

2. To test the constructive effect of the increased cell activity of the hematopoietic system, anemic subjects should be used, and a hemoglobin percentage and a white and red blood cell count made before beginning the baths and again after every few baths, say once a week. In the meantime a regular diet should be observed and no medicines given which would affect the hemoglobin percentage or the blood cell count.

Manifestly this is impossible in private practice. A physician can not take a private patient and experiment with him, and when a patient suffering from anemia from any cause places his health in the hands of his physician, the latter would be very culpable if he did not give him the best blood constructing tonics as well as the properly regulated bath, and such medication would alter the value of the test. But there is at Hot Springs a free bath house, where over 150,000 baths are given annually, at a net cost to the Government of $2\frac{1}{2}$ cents per bath, to nearly 5,000 indigent sick. I filed a written application with the Interior Department several months ago for the privilege of merely making observations of these cases, not of treating them, and a prominent specialist filed a similar application at the same time. Both applications have been ignored. It is plainly the duty of the Government to have these experiments made, as the clinical material is abundant and very few of these people have the means to buy medicines which would change the test value of the baths. I may insert parenthetically that the Government reports, of such cases bathed without medicines or at least in most cases without proper medical attention, that 93 per cent are benefited and nearly 20 per cent cured and discharged.

3. The remaining obvious experiment needed is fortunately within reach of the individual observer, that of the effect of the bath on the blood pressure. As is well known any warm bath will have the effect of slightly reducing the blood pressure. But, with this bath causing an apparently sthenic fever accompanied by a pulse greatly increased in rapidity, one would naturally ex-

pect an increase in blood pressure. The contrary is the case and in a series of experiments, which I have made at the tub-side, not all however on subjects in perfect health, the blood pressure fell from 5 to 50 millimetres of mercury for a two to three degree rise in temperature. This seemed very puzzling at first, but on consideration of the report of different patients, who had accidentally stayed too long in the tub, and whose temperatures had gone to 104 and even over 105, the explanation at least seemed apparent. These subjects report symptoms not attributable to full arteries but to over-full veins, and I have no doubt that many of the cases of syncope occurring in the bath houses which are blamed on the heart are really due to cerebral anemia from the disproportionate amount of blood in the superficial veins.

As a matter of course, if the blood pressure in the nervous system is increased the blood pressure of the arterial system, as taken by the sphygmomanometer, is diminished.

Again, by way of parenthesis, I wish to mention two cases which, without a knowledge of this fact, I would not have permitted to take the baths. One was a woman suffering presumably from a fatty degeneration of the smaller arteries, but not of the heart, also obesity, and an increased blood pressure. She gave a plain history of heredity, her mother and several aunts having had similar trouble, and a clinical history of several ruptures of minute arterioles in various parts of the body and in one instance in the brain. The fact that the baths would decrease her arterial blood pressure assured me of their being safe and presumably useful and the results have been very gratifying, she is still under treatment. The other patient was a man whose father and two paternal uncles died after a short term of acute mania. When he reached Hot Springs, accompanied by his physician, he was as near a "brain-storm" as possible, and had to be kept under the influence of drugs. His blood pressure was the highest I have ever seen, 220, but during his first bath, his temperature only going to 101°, the blood pressure fell 50 millimetres. After three baths he was able to sleep without drugs, and after five baths the net loss in blood pressure was 30 millimetres. I did not have another opportunity to see him in the tub, but from his physician's report judge that the blood pressure approached normal during

the latter baths. His prominence in the business world necessitated his leaving Hot Springs after the fifth bath, but if he returns as he expects to shortly, and takes the baths during this crisis of his life, I fully expect to see the monster heredity thwarted of at least one victim of the mad house.

In considering the physiological effect of any crude drug due attention should be paid to the quality of the various specimens of the product. Now it must be admitted that as used, the Hot Springs baths are very crude, and as might be expected, the results vary at the different bath houses. The radio-activity of the waters depends, according to Boltwood and Pratt, who made the Government tests, upon the presence of a radio-active gas. This gas is of course lost to some extent by exposure of the water in primary reservoirs and to a greater extent by the exposure of the water in the cooling tanks which each bath house provides, as there must be a tank of cool water with which to temper the bath, the hot water being delivered to the bath houses at a temperature of from 135° up.

There are twenty-four bath houses at Hot Springs, and they may be put in four classes, the very active, the active, the slow and the unreliable.

In the very active the patient's temperature is apt to go to 104 or over, in ten minutes. In the active the ten minute bath will cause an average rise of the body heat to 102° or 103°. In the slow the temperature will go to 101° on an average in fifteen to twenty minutes. And in the unreliable a patient may, on some days, get a good reaction, and on others he may stay in the tub forty minutes and not get a rise of temperature more than a fraction over 99°. And these are not fixed results, but will be found to vary so much at different times that some of the houses are hard to classify. However, if the patient always measures the effect with a thermometer under his tongue he will at least know what he is getting. This variation in results at the different houses, even when supplied with water from the same reservoir, is not due to any change in the water, as it emerges from the earth, but as before stated, to the duration of exposure in the primary reservoir and to the age of the water in the cold tank at the individual bath house. Houses with very large cold tanks would be

expected to have a slow bath, the larger bulk of water cooling more slowly would be longer exposed and become more inactive and would probably also be delivered at the tub even warmer than from a smaller cooling tank, thus requiring more of the inactive water to cool the bath and a greater dilution of the fresh active water from the hot side. The results could be made more uniform if the primary reservoirs were made as small as possible to still serve their purpose and if the cooling tanks were done away with and the water on the cold side of the tub faucet delivered through a refrigerating coil. However, the existence of the different activities at different houses is very convenient from a therapeutic standpoint, after one has determined which is which, as may be readily conceived. The very active bath is excellent for a very limited number of cases, but the results are disastrous to weak, anemic individuals who improve rapidly from the slow bath. The second class, the active bath, has a broader field of usefulness. The slow bath seems to give the best therapeutic results in the largest number of cases. The fourth class being unreliable should not be used. There are only a few of these, and I have no doubt they can be made reliable by changes in their cooling tanks.

In my other paper on this subject, I fixed 101° F. as the maximum useful reaction, but am now convinced that I came to that decision after too small a number of observations, and these on a series of patients whose malady, chronic malaria, made them peculiarly susceptible to the bad after-effects of an excessive reaction. Further observation has led me to believe that, while a maximum rise to 101° in a slow bath is the most generally useful measurement for dosing the increased metabolism, in selected cases it is well to secure a greater effect. Broadly speaking, a pronounced effect from a very rapid bath is not followed by the same headache and prostrated feeling as is the same effect from a slow bath. This argues again in favor of the slow bath properly dosed. Any practitioner who has ever given ten grains of calomel in one dose and the same amount in a series of doses will understand what I mean.

There are adjuncts to the baths at Hot Springs, the paper bath, the hot room, the needle bath and the shower, which may be used at other places to meet some of the indications of hydrother-

apy or thermotherapy, but none of these are peculiar to the place and in the tub only is seen the true Hot Springs effect.

Before closing I wish to reiterate and impress upon you that this is not merely *hot* water, that none of the peculiar effects secured at Hot Springs are due to the heat of the water, that when you have told your patients in the past that "hot water is hot water anywhere," and have advised them to take hot baths at home instead of going to Hot Springs, you have made an error only excusable by lack of information as to the true physiological effect of these waters.

DISCUSSION.

DR. BASS. If the belief of Dr. Martin and other observers be correct that the waters are radioactive, it would, to my mind, far from recommend the water until the therapeutic effects of radium rays are better understood. The application of such powerful agents as radium and X-rays produce certain toxins, and we ought to be very careful about sending our patients there, and ought to be careful to send them to Dr. Martin or someone who will be careful. Another thing, an exposure to X-ray of even ten minutes is dangerous. I know one man who is spending thousands of dollars in getting an equipment which will enable him to make his pictures quicker.

DR. G. R. FOX. I speak from personal experience of the wonderful properties of these waters. Only a few years ago I went there suffering from pericarditis with effusion, and was almost cured in nineteen days. I talked with an old army surgeon who was in charge of the Government baths, and told him I had read an article in one of the popular magazines concerning radium, and it was stated therein that many of the deep springs of Europe were radioactive, and asked his opinion as to the possibility of the waters of Hot Springs being radioactive. He replied that he had been making investigation, and had found evidences of radioactivity. He also stated that he believed the water more potent when used as recently as possible after being piped from the springs, and that when cooled in tanks it lost much of its potency.

He was also of the opinion that some of the springs on the reservation were much more radioactive than others.

While visiting the Government baths that morning, I noticed that the whole atmosphere seemed charged as with electricity, which seemed very stimulating, more so than any other bath room I had previously visited at the springs, and I had visited nearly all of them.

I presume this peculiar phenomenon was due to the radioactivity of the atmosphere, as many tubs were being filled at the time with very hot water, because no cooled or tank water is used by the Government, but the water is drawn at the temperature at which it arrives direct from the spring, and is allowed to cool in the tub to the desired temperature for the bath.

I wrote to Dr. William J. Morton, of New York, shortly after this, and asked his opinion concerning the possibility of these waters being radioactive, and he replied that it was his opinion that they undoubtedly were, and probably owed their remarkable curative powers to this property.

I think Dr. Martin's discovery that these baths cause a rise of temperature, and that the bath can be given to better advantage as to duration and temperature by using the clinical thermometer as a guide, is very valuable. I move that the Society tender him a vote of thanks for his valuable paper.

DR. DANNA. I have been enlightened by the doctor's paper. I have sent a number of patients to the Springs and they improved. I have been of the idea, however, that their efficacy was all a matter of "hotair" on the part of the doctors there. At first he dispelled that belief, but as he went on he increased my belief that it really was the hot air, but that the hot air is in the water, but just when I was beginning to think we could bring the water down here and treat our patients, he tells me that when it stands it loses its hot air.

I think we owe the doctor a good deal of credit for bringing to our minds the cause for the benefits coming from the use of the water.

DR. MARTIN, (closing.)—I accept your thanks with becoming humility. If I can get you to remember that it is not just hot water, which we have at Hot Springs, I will be well repaid for this paper. In reply to Dr. Danna's suggestion that you may be able to ship a few car loads of the water here, I believe that in the

years to come you will be able to get a Hot Springs bath at any Turkish bath house, probably in your own home, but the radium salts will have to become cheaper than they are at present. I have been asked privately a number of times what the waters of Hot Springs are good for, and while I do not wish to go outside of the title of my paper, I will give you briefly the most important diseases treated there with benefit. First: In importance on the list is chronic malaria. The increase in the hemoglobin is very rapid after a few baths, if they are not too high in effect. Second: The whisky cases get the next best and most prompt results. The baths certainly will kill your patient's taste for liquor (very few people living at Hot Springs ever take the baths!) The third in degree of benefit received, I think, are certain forms of the various conditions classed as rheumatism, which receive benefit in proportion to the form, subacute rheumatism the most promptly. Fourth: Tertiary syphilis is benefited in two ways; by elimination and by permitting larger doses of medicine to be used. Last of all are the most numerous cases that come, that is, secondary syphilis. There is no doubt they do receive some benefit from the routine treatment. You will find sometimes that the hemoglobin will drop constantly after the mercurial treatment, and the baths keep up the hemoglobin. Also, more medicine will be used and the insurance against syphilis in later years is worth the expense of the trip.

And in the future I can see a great field for the treatment at Hot Springs of arterio-sclerosis and kindred diseases through the marked effect on the blood pressure, which is lowered very much during each bath.

All other chronic diseases in which elimination is indicated are more or less benefited by these baths.

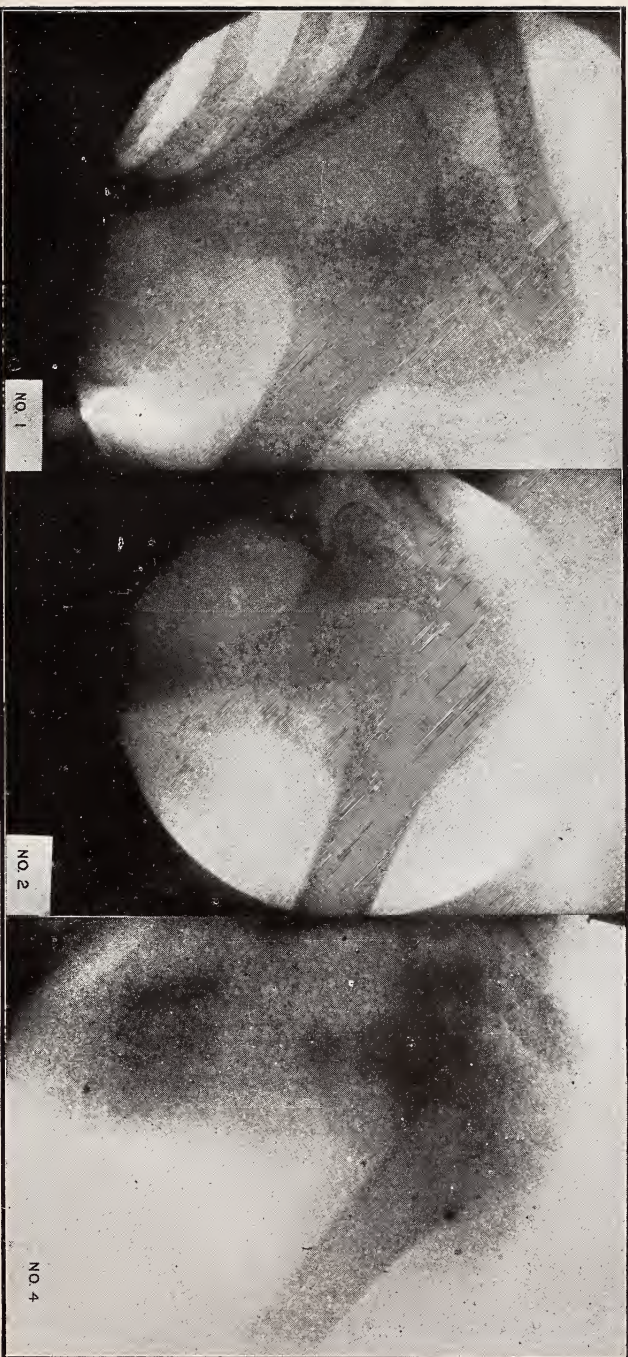
A Case of Forward Dislocation of the Humeral Head Irreducible by Manipulation, Reduced by Open Operation.

By DR. F. W. PARHAM, New Orleans.

J. R. W., age 44 years, on Sunday evening, September 30, about 7 o'clock, while alighting from a railroad train at Gloster, Miss., was thrown by a sudden forward jerk of the car from the steps to the ground, striking on his right shoulder. I saw him at the New Orleans Sanitarium on Thursday, October 11. I had little difficulty in making out a forward dislocation, under the coracoid process. The arm stood out at an angle of nearly 45 degrees from the body. The pressure below the acromion and Dugas' test showed the head of the bone not in the glenoid cavity, although there was considerable movement of the arm on manipulation. The arm could be carried out to a right angle and a little above the level of the shoulder, though with considerable pain. Under general anesthesia I made attempts by manipulation, including Kocher's method, to reduce the dislocation, but failed. The radiograph, taken for me by Dr. Hatch in order to ascertain, if possible, the cause of failure of reduction, revealed nothing that adequately explained the difficulty. You will observe in the picture a small fracture in the neighborhood of the tuberosity. There was no break in the longitudinal continuity of the bone.

On October 18 I made another attempt, under general anesthesia, putting Stimson's method to a severe test. The arm was freely moved, but in spite of all our efforts it remained out of place. The shoulder was made quite sore by these manipulations, so I determined not to make any further effort in this way to reduce the dislocation.

On Saturday, October 20, I cut down on the joint through the anterior oblique incision, exposing the neck of the bone and the glenoid cavity. The head of the bone was not visible through the incision, although the whole of the glenoid cavity could well be seen. With the kind assistance of Dr. E. D. Martin, who manipulated the arm for me, I ascertained that the difficulty lay at the anterior rim of the glenoid, where the head of the bone could be



ILLUSTRATING DR. PARHAM'S ARTICLE.

seen projecting into the axilla, and firmly tied down by the ligamentous structures passing across the neck of the bone. When these fibres were cut, the cartilaginous surface was disclosed lying behind the great pectoral muscle and reduction was easily accomplished. Considerable traumatism had been done in the combined cutting and manipulating operations, the biceps tendon having been lifted out of its groove, and the fragment of bone, seen in the radiograph, having been removed by scissors. Owing to the lacerated character of the wound, there was considerable difficulty in closing the sac, so that the closure of the joint had to be completed by bringing the fascial and muscular tissues together over the line of capsular approximation. The wound healed apparently by first intention, but subsequently had to be opened up, owing to a fluctuating spot in the line of incision. This sinus, which seemed to extend deeply toward the joint, was treated by packing and closed in the course of a month. The deltoid muscle remained incompetent for a long time, but this has gradually improved, so that now he can voluntarily carry the arm up above the level of the shoulder, and improvement seems to be progressive. The X-Ray pictures will show the difference in the relations of the humerus and scapula before and since the reduction.

DISCUSSION.

DR. E. D. MARTIN: I was fortunate enough to see this case from the beginning to the end, and assist the Doctor in reducing the dislocation. The first point of importance is that if it had not been reduced he would have been crippled for life. It was only after this piece of bone was removed that it was reduced. The remarkable thing about it is the use he has of this arm at the present time. I saw him a short time ago, and he was perfectly comfortable, and I think in a few months he will have the free use of the arm.

DR. HATCH: I had the pleasure of seeing this case. At the time there seemed to be a piece of bone which was not removed. I would like to ask if there is any further evidence of that piece of bone being there, or whether we were mistaken in regard to it.

DR. PARHAM: I neglected to mention that Dr. Hatch was kind enough to take these radiographs for me, my own machine being

out of order. The radiographs were his work. The piece of bone he speaks of, I think, must still be there, although not clearly shown. The notch in the bone which shows, I think, was made by the scissors. The only trouble is a little interference with the movements of the scapula. The arm moves as though it were partly fixed to the scapula. I believe the normal relations between the scapula and humerus will be largely restored.

Fracture, with Fibrous Union, Treated by Induced Pin-Callous.

By DR. WM. M. PERKINS, of New Orleans.

The following brief case report is submitted, principally because the method used to secure bony union is a little out of the ordinary. I had hoped to induce the patient to be present to-day, but my efforts have been unavailing.

In October, 1905, the patient, white male about twenty-five years old, was caught by a machinery belt and received a fracture about the middle third of the humerus. After being treated some time by another physician he consulted Dr. Maxime Landry, with whom I saw the case in consultation about six weeks after the injury. As the patient seemed to have some fibrous union, we applied a plaster of paris splint. This did not fit well and was removed. After some manipulation and massage, the arm was again put up in plaster of Paris.

The fact that the false motion appeared to be lessening from time to time, together with the known tendency of humeral fractures to finally unite, even after months have elapsed, encouraged us to continue treatment by splints with occasional massage until May 31, 1906, when with Dr. Landry's assistance, I operated upon him at the Sanitarium.

The operation was undertaken with the idea that it would be necessary to freshen the fractured ends with wire. After making the incision through the external aspect of the arm, it was found that a very strong fibrous union had taken place with a slight defect in alignment. Considering the slow convalescence of many cases of bone wiring and their frequent complications, as well as

the uncertainty of securing anything better than a good functional result, we decided to leave the fibrous union undisturbed and endeavor to induce osteogenetic activity through the mass of fibrous tissue. The bone ends appeared to be separated about a half to three-quarters of an inch, and the fibrous mass uniting them was somewhat larger in diameter than the shaft of the humerus. With the electrical surgical drill the fibrous tissue was excavated until it appeared as a spool-shaped plug, smaller in diameter than the humeral shaft, connecting the two portions of the shaft with a slight faulty alignment. With a small bit, holes were then drilled in various directions so as to run obliquely from one bony fragment through the fibrous plug and into the other bony fragment. It was hoped that thus to induce the formation of new bone along these drill holes—first in the bony tissue, and later in the fibrous mass, believing that these bone-pins would become active centers of ossification and hasten the completion of the bony union. The fact that the channels made by the drill would fill up with aseptic blood clot only made it more probable that the pin-like ossification would take place. The wound was closed without drainage and the arm placed in plaster cast. In about seven weeks the patient was discharged with apparently firm bony union. He has been seen once since and complained of some stiffness about the elbow and lack of power in the muscles of the arm which had atrophied during his long treatment with the plaster cast.

DISCUSSION.

DR. E. D. MARTIN: I have to take exception to what the doctor reports of the condition of the bones. I think I saw the case, and, if so, the bones were almost in contact, and almost overlapping. I do not think the result he reports is possible unless that drawing is exaggerated. There would be only a sixteenth of an inch between that, if I remember correctly. I do not think it possible that such an operation should be successful if you had a fibrous union of over half an inch. I believe it is only where you have an overlapping fragment. I think if the doctor will at some future time take a skiagraph he will find that I am right.

DR. WM. M. PERKINS (in closing): I did not discuss what "would happen in these cases", but what *did* happen in *this* case. There was a separation of about one-half inch between these fragments. I used a drill the size of a lead pencil which would easily have passed between the fragments without touching them at all.

I had a radiograph taken after his discharge which does not show sufficient detail to give any idea how much separation there was. The arm seemed to be all right when the patient was discharged, except for the atrophy and stiffness which might be expected in an arm kept in splints from October to May.

When last seen the arm did not appear strong enough for ordinary work, but I judge that a few weeks of manipulation and massage would put it in satisfactory condition.

(Repeated attempts have been made to get in touch with the patient up to this date (Aug. 6, 1907), but they have been unavailable.)

Gall Stones Disease with a Review of Cases.

By J. M. BATCHELOR, M. D., New Orleans, La.

Gall-stones disease has doubtless claimed its victims from a period as remote as the existence of man, but we find no record of surgical interference till 1618. In that year it is recorded that gall-stones were removed by surgical operation from a living patient. From that time surgeons began cautiously pushing their way to a knowledge of the disease and of the extent to which surgical interference might be borne. However, a full century elapsed before any deliberately planned operation for the removal of gall-stones was performed. Jean Louis Petit in 1743 deliberately diagnosed the presence of gall-stones and deliberately operated on his patient for the cure. He had a just appreciation of the dangers of the disease and fully recognized the unsatisfactory status of the affection at that time in respect of etiology, symptomatology and dangers attendant upon it. He exclaimed: "How many people have died because this disease was not recognized, or because no operator could be found who would undertake to rid them of their disease by means of an operation." The wisdom of these remarks

has been amply justified by subsequent years of a more intimate acquaintance and knowledge of the disease; and they may well be applied to the subject at this date.

In looking over the records of the Charity Hospital from and inclusive of the years 1894 to 1904, I found but 23 diagnoses of cholelithiasis among upwards of 75,000 patients. Is this not significant of failure to recognize the disease, when by the statistics of Reidel, Kehr and others, gathered from observations made on autopsy, gall-stones occur in 10% of all persons? The subject has not been given the attention that is certainly due it by reason of the frequency with which it exists and because of the gravity of the affection. Patients with gall-stones commonly reach the surgeon after the disease has passed through all its initial and intermediate stages, and fortunate is such a patient if the surgeon does not find some one of that array of final results of chronic irritation and cholecystitis—malignancy, perforation, gangrene, blockage of the common duct, biliary fistulæ, suppurative cholangitis with necrosis of liver cells, hepatic abscess, atrophic hepatic cirrhosis or profound destructive jaundice.

In the last six years I have operated on the gall-bladder for gall-stones disease 18 times, in 8 cases the disease had endured from 5 to 10 years; in 3 from 10 to 30 years; in 5 from 1 to 5 years, and in two only had the disease a duration of less than one year. In two cases was found gangrene of the gall-bladder with rupture, and in one empyema with rupture. Two of these cases recovered, one died of septic peritonitis. In seven cases severe peri-cholecystitis had produced adhesions to the liver, transverse colon and stomach, pain resulting from this being the prime factor in deciding the patient to seek surgical relief. Jaundice was, or had been, present in only seven cases. In one of these, with obstruction of the common duct, jaundice had been present constantly one year, inducing a profound cachexia and debility which eventually led to his taking to bed too feeble to rise, and incapable of withstanding the effects of general anesthesia. The operation was done under cocaine analgesia and 75 gall-stones removed. This patient succumbed to the effects of chronic icterus ten days after. In one case in which jaundice had persisted seven months a pseudo-hemophilia had been induced; indeed, so marked was the hemor-

rhagic tendency that I was compelled to defer operation that remedies might be employed to increase the blood coagulability. On two occasions this patient had almost fatal hemorrhage from a chap on the lip, and, undoubtedly, such would have been the termination had not a constricting rubber bandage been applied about the chin. It is a matter of interest to note that this patient, after five days treatment with calcium chloride, 3 grains every 4 hours, went through the ordeal of an operation and manifested no unusual tendency to bleed. It is of additional interest that this patient died of profuse gastric hemorrhage five days after the operation, no calcium chloride being administered during this time. From the remarkable history of this patient, as well as from the use of calcium chloride in other hemorrhagic conditions, I am led to believe the drug is efficient in increasing blood coagulability and should be employed before operation in cases exhibiting a hemorrhagic inclination. The fatal termination of this last named case from gastric hemorrhage points to the fact that the danger from hemorrhage does not terminate on the operating table. Time is required for the regeneration of the blood and the return of its normal coagulability, and during this period of blood regeneration calcium chloride should be continuously administered.

My observations made in the course of the cases here recited leads me to the following deductions: That gall-stones disease is too often unrecognized; that the gravity of the disease has not received sufficient consideration from many professional men, and is, almost, if not quite, discounted by the laity; and finally, that gall-stones disease in respect of the indication for early diagnosis and early operation should be placed in the same category as appendicitis. Particular emphasis should be placed upon the infrequency of the recognition of gall-stones.

A review of the abundant literature of the subject will show that in the long series of operated cases, the earliest symptoms were referred by the patient to the stomach. Under the guise of indigestion, with all its protean manifestations—neuralgia of the stomach, flatulent distension of the stomach, nausea after eating a full meal, and epigastric pain—patients drift, from year to year, from one physician to another, until jaundice, that most inconstant and infrequent symptom of the disease, points unmistakably to

gall-stones disease. Thus the stage at which surgical treatment should be advised is allowed to pass and the patient eventually comes to the operating table after the full development of that complex array of final inflammatory results which convert a simple and safe operation into a difficult and dangerous one.

The Mayos, in their review of 1,000 operations for gall-stones, inferentially indicate the wisdom of early diagnosis and operation. In this series of cases the mortality was 2.46% for cholecystostomies; 4.3% for cholecystectomies and 11.7% for common duct operations. In 40 cases that had progressed to malignancy the mortality was 22%.

Not alone does the duration of the disease influence the mortality, but a potent influence is exercised in determining the status of the patient after operation. Many patients recover from the operation after drainage, or excision of the gall-bladder, but are invalided for the remainder of their lives by the constant and severe pain resulting from intra-abdominal adhesions, which, though broken up at the time of operation, re-form, never to cease incessant and aggravating importunities. In my limited number of patients there are two in whom excision of the gall-bladder was done, that, though in excellent health, are never free from the pains and sufferings induced by peritoneal adhesions from long continued peri-cholecystitis.

From these considerations early diagnosis and early operation must be insisted upon.

DISCUSSION.

DR. MATAS: It would be interesting to compare the number of operations performed for biliary diseases in our community with the number of operations performed in other localities. The fact that a great hospital like the Charity, which reports nine thousand patients treated annually, and nearly twenty thousand patients in its out-door department, with only a record of eighteen operations for gall-stones in six consecutive years by the house surgeon, whose opportunities for the treatment of these cases are greater than those of any other member of the staff is, in itself, a striking commentary upon the conservatism, so called, of the practitioners in this section. While the practice of the Charity Hospital, in spite

of its great wealth of material, is not an absolute criterion of the actual amount of surgical work done on the biliary tract by the surgeons of New Orleans, in the various private institutions outside of the hospital (my own practice exceeding over eighty cases operated in the same time), it must be admitted that the attitude of the general practitioner towards the surgical treatment of gall-stones disease is, to say the least, not as favorable as it seems to be in other sections of the country. Viewing the situation from the standpoint of local surgical experience, it is apparent that gall-bladder cases are brought to the surgeon for relief chiefly in the most advanced and confirmed cases, and that the milder or less typical cases are either not recognized or treated by the internist by non-surgical measures until the classical picture of biliary obstruction and infection with all its attending phenomena—violent and persistent pains, chills and fevers, jaundice, clay-colored stools, mahogany colored urine, and general cholemia—compel an acknowledgement of the futility of internal medication.

In this way the operative treatment of cholelithiasis is still invested with a formidable character which is unfavorable to surgery, tending to perpetuate the tradition and dangerous conservatism which has so long prevailed in our midst. What must be emphasized in this discussion is that the disease should be recognized early in its less typical stages, and that the safety of the patient lies in early intervention, long before the mechanical blockade and attendant infection of the biliary passages have complicated the situation and darkened the prognosis. The operation of cholecystotomy, which is one of the simplest and safest in surgery in the early stages of gall-stones disease, is transformed into a very serious and complicated operation after the disease has reached the stage of chronic infection, permanent obstruction of the common duct with cholangitis and prolonged saturation of the organism with bile poisons. All surgeons of experience are agreed that the mortality of simple cholecystotomy, in nonseptic cases, should not exceed two or three per cent; whereas, in the delayed operation, requiring choledochus drainage, are followed by a mortality of twenty-two to thirty per cent even in the best hands.

Now why wait for this advanced and dangerous stage before operating? Why wait for the dangerous classical picture to de-

velop? Why not adopt in gall-stones disease the same principle so successfully applied at the present time to the appendix and intestinal obstruction, and advise operative relief once the diagnosis is established and at a time when the risk to the patient is reduced to a minimum?

DR. PARHAM: One thing that is particularly worthy our notice is this, that we should not wait for jaundice to indicate what we should do. That really has very little to do with the diagnosis of gall-bladder disease. Many of the cases we operate on now show no jaundice, or very little. It is worthy of remark, I think, that as a man gets older in his operative work, he operates upon more of these cases, because he learns more and more that cases demand operation with some of the classical symptoms absent; indeed, in many cases where the diagnosis is not at all clear. Many of them are cases where we cannot say positively the gall-bladder is the seat of the disease. Sometimes it seems to be the stomach. I assisted in an operation a short time ago which was undertaken as a stomach operation; we found nothing wrong with the stomach, and then directed attention to the gall-bladder, which the symptoms had not indicated as the seat of trouble, and found an enlarged gall-bladder. Sixty-three stones were removed and the patient made an uneventful recovery. So I think the attention of the general practitioner cannot be too pointedly called to this fact, that we wait too long for jaundice to appear, when, really, that has very little to do with the diagnosis. It is a fatal mistake to depend upon that for our indication for operation.

DR. KIMBELL: I would like to know if these cases are not often marked by hepatic colic. Isn't that one of the more constant symptoms of gall-stones disease? I have a case under observation which may be gall-stones disease. It is in an early stage and there are no symptoms of jaundice, or anything of that sort. I would like, before the discussion is closed, for some of the members to give a little more distinct explanation of the early symptoms which we might look for.

DR. E. D. MARTIN: I want to call attention to a point which may be of help in clearing up the diagnosis in some of these cases, and that is of pain which may come to these patients while sleeping or resting on the back. My attention was first called to this two

years ago, when I had a patient, a young lady seemingly in the best of health, who had been treated for several years for gastric disturbance. I was at a loss to make a diagnosis until she remarked that a peculiar thing was she could not sleep on her back, that when she did she had severe pain. I then made the diagnosis. In another case I was able to confirm my suspicion by the same thing. I believe to-day I have seen a third case, which gives the same history. Of course, we can understand that in the case of small stones, they plugged up the orifice when the patient was lying on her back, producing this condition. I think we should bring out all the points we can as to the diagnosis.

DR. BATCHELOR (closing): I refrained from discussing symptomatology in my paper, but I believe if patients are closely questioned a diagnosis will be arrived at. Colics of intense character coming on shortly after the ingestion of a full meal, if of frequent occurrence, should be regarded as suspicious of gall-stones.

The hyperemia induced by stomach digestion is closely followed by hepatic hyperemia and an outpouring of bile. The gall-bladder takes part in this general stimulation and emptying itself is apt to dislodge gall-stones which, in transit of the cystic or common duct, produce these post-prandial colics. It is because these colics so frequently follow a heavy meal that patients regard them as symptoms of indigestion and medical men often fall into the same error.

Orleans Parish Medical Society Proceedings.

President, DR. AMÉDÉE GRANGER.

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141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. E. M. HUMMEL, Chairman.
DR. HOMER DUPUY and DR. S. K. SIMON.

MEETING OF JANUARY 25, 1908.

DISCUSSION OF DR. CAZANAVETTE'S PAPER ON
JACKSONIAN EPILEPSY.

DR. HUMMEL: The case just presented is of much interest, and I think Dr. Cazenavette is to be congratulated upon the manner in which he has worked up the case and presented the subject to

the Society; especially in view of the fact that an accurate diagnosis was made as to the site of the lesion giving rise to the symptoms, before the case went to the surgeon.

I saw and operated upon a similar case several years ago. A spicula of bone was found projecting from the inner table of the calvarium and penetrating the left Rolandic area. Eight years had elapsed since time of primary injury—a severe blow on the head. At first there were clonic spasms of right arm and hand, which subsequently spread to lower extremity and face. Finally the seizures became general, with loss of consciousness and mental symptoms. The bone depression and splinter were removed. Post-operative results were not good, however.

One point Dr. Cazenavette mentioned, but scarcely laid sufficient stress upon perhaps, appeals to me as of importance, as distinguishing this condition from cord or peripheral nerve affections where the convulsive condition is overlooked, namely, atrophy and paresis of the muscle group or limb involved. This is quite a constant sequence of Jacksonian spasms of any standing.

I would further like to make a plea for the preservation of the term Jacksonian Epilepsy as applied to monospasms of various distribution unaccompanied by loss of consciousness,—a partial epilepsy. This condition is recognized as a disease entity, and has special interest attached to it as such, notwithstanding it usually expands into grand mal proper, as demonstrated by the present case.

I saw the operation upon Dr. Cazenavette's patient and noted with others present, the rather remarkable fact that the bone plate was beneath the dura, detached and buried in the cortex, while the dura remained intact. Some authorities are of the opinion that detached bone fragments found under these circumstances have formed in situ. I would like to ask Dr. Cazenavette whether he indulged in any speculations as to the origin of the fragment referred to in this case.

DR. E. D. MARTIN: Before cranial surgery was developed, the most effective (operative) treatment of traumatic epilepsy was neglected. Relative to the nomenclature of such condition, I think the term traumatic epilepsy the best.

Too often we regard scalp wounds too lightly. We should al-

ways exclude the possibility of fracture of the calvarium before stitching a scalp wound and sending it away. If this were done traumatic epilepsy would not be such a frequent occurrence.

The presence or absence of fracture does not stand for the presence or absence, respectively, of injury to the brain tissue, however, as traumatism merely and without fracture of the bone, often produces gross injury of the brain substance and meninges, through transmission of the force of the blow. I recall the case of a boy receiving a blow over the supra orbital ridge, apparently an incised wound, which healed promptly. Two weeks after the time of the injury I was called to see the patient and found him excited and uncontrollable. A careful examination revealed the presence of a depressed fracture.

Two years ago, a child eight years of age was brought to me from Texas, giving a history of having been struck on left parietal region with a ploughshare four years previously. One year after injury he had developed Jacksonian epilepsy of right arm and hand. These seizures became more widespread gradually, until grand mal was present. At the time I first saw the case, he was having 5, 6, 10 or more seizures in 24 hours, was mentally deranged, destructive and unmanageable. There was paresis of right arm and hand, with atrophy. I operated, relieving the depression and clearing away adhesions and scar tissue. The boy did well afterward, having one convulsion on night following operation and one a few days afterward. The mental condition also greatly improved as the child became sane, and was later able to make progress at school.

Another such case was later brought to me from the same community. This time the patient was a male adult who had received a severe blow on the head 16 years previously. Two years subsequently epileptic seizures were developed and the man, by degrees, lapsed into a dazed, stuporous mental state, the clonic seizures becoming more frequent and severe and widespread all the time. Before removal of the scalp tissue no absolute sign of fracture was discernable. Assisted by Dr. Parham, I removed an area of bone, at site of injury, about $2\frac{1}{2}$ by 3 or 4 inches. The dura was found adherent to subjacent membranes and cortex. All adhesions and cicatricial formations were removed. Post-operative results were

splendid, as all symptoms were relieved; but about a year after, the man came back, complaining of partial return of convulsions and disordered mental state. A second operation was done and it was found that adhesions had reformed at the old site. This time I inserted a celluloid plate, so fashioned and adjusted as to take the place of the missing bone flap. The cure was complete this time, and to the present day there has been no recurrence of symptoms. The function of the celluloid plate is to prevent contact between superimposed soft tissue and the cortical substance, and thereby the possibility of reforming of adhesions. I regard this feature of the operation very necessary, as experience has taught me that the motor disturbances and disordered cerebration are not so much the result of pressure from focal depression in bone as irritation from adhesions between soft tissues.

Extended observation of epileptoid conditions in children has convinced me that traumatism is more frequently the cause than was previously thought. Only recently Jacobi, of New York, has emphasized the frequency of such conditions dependent upon injuries received at birth, such as pressure from instruments, subdural hemorrhage and other injuries incidental to prolonged and difficult labor. So, then, we may regard Jacksonian epilepsy as being nearly always caused by trauma of the cerebral contents.

I wish to advise careful observation of all head injuries, lest fracture of severe injury to the cranial contents be overlooked and convulsive symptoms be neglected. In operating, the celluloid plate or some suitable substance should be interposed between the soft flap and subjacent brain tissue, for reasons sufficiently emphasized in the history of one of the cases mentioned before.

Percy Nicholson, of Atlanta, lays great stress on the necessity of such a step in this kind of cranial surgery, and I wish to insist upon its necessity with equal emphasis.

DR. CAZENAVETTE (in closing): Dr. Hummel has called attention to the paresis of the muscles of the hand and fingers. I would like to say that the patient, in playing marbles, used the left hand, but in throwing a rock he used the right hand. It is thus evident that he had lost particularly the finer movements of the right hand. I saw this myself.

Where the spicula of bone came from, I am at a loss to say.

That it could be a portion of the frontal bone driven back under the intact dura, is hardly probable.

DISCUSSION OF DR. BUTTERWORTH'S PAPER ON
GLANDULAR FEVER.

*(Manuscript of paper not furnished publication committee by
essayist.)*

DR. STUMPF: Dr. Butterworth has said everything that is to be said about this disease. I have known this malady for the past twenty years. I have observed it principally on the outskirts of the city, particularly in the spring and the fall of the year. I have observed that it occurs where weeds grow in abundance and, accordingly, attribute it to the pollen of plants.

DR. SIMON: I think the Society is indebted to Dr. Butterworth for the paper just read. This is the first paper, I believe, we have had on the subject in the Society. Of course, one might read the text books and current literature on glandular fever, with a passing interest, but it takes an essay like this to focus our attention on the presence of the disease in our own midst. Dr. Butterworth, in the description of one of his cases, casually referred to the blood report. I would like to ask the doctor, further, whether the blood examinations offer much, if any, diagnostic help. Another feature which the doctor seemed to lay stress upon was the constipation, which might open up an interesting point. Does the constipation precede or, as in other infectious diseases of childhood, does it accompany the attack, and if so, whether it is especially pronounced here? As a causative factor in the condition under discussion, constipation does not appeal to me. However, constipation is widely causative in the symptom complex of many diseases of childhood. The products of intestinal decomposition are readily absorbed in children, and often give rise to many varied symptoms. It should be a routine practice to examine the urine always, for the ethereal sulphates, but especially indican. I don't think that indican, or rather the indoxyl potassium sulphate itself, is at the bottom of the symptoms, but indicanuria is our best guide to the diagnosis of intestinal auto-intoxication.

DR. BUTTERWORTH (in closing): I am glad to observe that my confrere has borne me out in saying that he has observed this condition for the past twenty years. I will remark that my experience is based on twelve cases. The best article on this subject can be found in Vol. III of Osler's *Modern Medicine*, by Dr. Boggs, of Johns Hopkins.

Dr. Van Stock observed, almost immediately after Pfeiffer's observations, that the disease is caused by autointoxication. In connection with this, I will remark that the constipation does not precede the fever and glandular swelling, but occurs later and is a part of the clinical picture and continued throughout the attack. The recently accepted view is that the portal of infection is the pharynx and tonsils, more strictly speaking, the pharyngeal tonsils.

First the cervical glands, later the post-cervical, inguinal, axillary and mesenteric glands are involved. Toxemia therefore results, with subsequent adenitis.

The suggestion that the infection may be due to pollen is very interesting. All observers agree that the time of most frequent occurrence is during the fall and winter months. My first case was observed on September 21, 1907.

As to the blood study, I may say that out of 12 cases only 4 cases were studied. My impression is that there is an increase in the polynuclear at the expense of the small mononuclear lymphocytes.

DISCUSSION OF DR. BASS' PAPER ON OPHTHALMO-TUBERCULIN REACTION.

DR. LUCIAN H. LANDRY: The subject of Dr. Bass' paper is one that especially interests me, because ever since the publication of Calmette's paper last June, I have had an opportunity to observe Dr. Matas' cases and experiences in the application of the test recently suggested for the early detection and differentiation of tuberculosis—and in our practice, more especially the surgical tuberculoses. Three tests have been the subject of investigation: 1st, the cuti-reaction of Pirquet; 2nd, the Mueller's test for tubercular pus, with Millon's reagent (equal parts of mercury and nitric acid); and 3d, the ophthalmic reaction of Calmette and Wolf-Eisner.

Of these, the simplicity of the last test has particularly appealed

to us, as it has to every observer, and has been made the subject of more frequent and satisfactory trials than either one of the other two procedures. Shortly after the publication of Calmette's paper and, until quite recently, we were not acquainted with the fact that the old tuberculin could be used in proper dilution in one or one-half per cent without detrimental effects upon the eye. Neither did we know that the pure tuberculin (old tuberculin, Koch), without dilution, could be applied to the skin and suspected dermal lesions without injurious effects as shown by Bandler and Naugleschmith of Prag last November. These observers showed that as much as ten drops could be applied to the surface of the skin by Pirquet's method, not only without danger but with excellent therapeutic effects. However, in the desire to follow Calmette's directions to the letter, and especially to avoid irritant effects upon the eye, particularly by using the precipitated tuberculin, we were compelled to delay our test until quite recently, when Mulford & Co., placed at our disposal, the convenient tablets which are now being used all over the country for this purpose.

The first application of the test was made on Dec. 21st, at the Charity Hospital, shortly after receiving the first lot of tablets from Mulford; and it is to the experience first obtained in the observation of the cases tested by Dr. Matas at his hospital clinic on that occasion, and subsequently in his charity and private services at the Touro Infirmary, that I will now refer to, with his permission, in presenting this brief summary of the results.

Dec. 21st, 1907. Four cases, all male adults, of positive tuberculosis were tested. Two pulmonary cases, taken from the white medical service, one of which T. B. were found in the sputum, the other not, although the clinical diagnosis of tuberculosis was very clear. Of these, one gave a doubtful reaction, and the other a positive. One case of pulmonary and lymphatic (cervical) tuberculosis, from the colored medical service, negative. One Pott's disease, Italian, age 31, from Wd. 7, positive to both cutaneous and eye reaction. In all the four cases the cuti-reaction was tried but reacted positive in only one case, and that one also reacted with the eye test. At a later date, a case of cervical adenitis, adult negro, age 29, from Wd. 1, gave a most positive reaction.

The cases at the Touro were as follows:

Tuberculosis of ankle: Positive.

Pulmonary tuberculosis: Positive.

Tubercular adenitis and mastitis: Positive. Confirmed by histological examination and tuberculin injections.

Hematuria (non tubercular): Negative.

Two sacro iliac tuberculosis: Negative.

Suspected intestinal tuberculosis: Negative.

Suspected pulmonary tuberculosis: Positive.

Suspected T. B. peritonitis: Negative. Found subsequently by operation to be non-tubercular.

Lymphosarcomatosis (Multiple): Negative.

Periosteal sarcoma of tibia; previously suspected to be a tubercular periostitis with cold abscess of tibia. Negative.

In the sixteen cases tested, nine were positively tubercular, of which seven have a positive ophthalmic reaction. One doubtful and one negative. The six non-tubercular cases were all negative.

One case suspected pulmonary lesion but no T. B. found in the sputum. Negative.

The types of the reaction were, in the majority, mild; only one severe enough to require any treatment. In this case, that on Miss L. B., there was a disseminated glandular tuberculosis, involving both mammae, axillary and cervical glands. This patient had reacted last year to tuberculin and the histological examination of the speimen removed at operation were also typical tubercular. In this case the reaction was characterized by marked redness and injection of the caruncle and plica semilunaris; the palpebral and ocular conjunctiva. In addition, there was sufficient secretion to agglutinate the lids and to cause a marked gritty sensation in the eye. The eye was washed out with a solution of argyrol, as recommended by Lapersonne, with prompt relief of all symptoms.

In determining the various degree of the ophthalmic reaction, the classification proposed by Comby and modified by Baldwin, has been adopted in our work. Aubaret and Lafon, who have also specially studied the clinical phases of this reaction, classify it into four distinct types: (1) The very intense form, painful, accompanied by chemosis, lasts more than a week. It is very rare and exceptional. (2) The intense form, characterized by velvety and turgescient appearance of the mucosa and abundant secretion which agglutinates the lids and eye-lashes; photophobia and lacry-

mation; this form lasts from five to six days. (3) The average type, very frequent; of less duration (2 to 4 days); moderate secretion, slight redness of caruncle, plica and palpebral conjunctiva; gritty sensation in eye as of sand or foreign body between lids. (4) Slight or very mild reaction; quite frequent, very important to recognize because the secretion and pain are scarcely appreciable. Hyperemia remains localized in the palpebral conjunctiva, caruncle and plica semilunaris. This reaction must be sought for by everting the lid and forcing the eye into abduction in order to stretch and exhibit the caruncle and fold to the best advantage. This type does not last more than 24 to 36 hours. In no case have the cornea, the iris or deeper tissues of the eye shown any tendency to react. The peculiarity of the reaction is that the conjunctiva alone reacts, and of this membrane, that part which is represented by the caruncle is by far the most constantly involved. Classification of Aubaret and Lafor. (*Gazette hebdomadaire des sciences medicales de Bordeaux*. 4 Aout., 1907.)

From the limited experience thus far obtained, we are satisfied that the Calmette reaction is a valuable, though not an infallible means of detecting tuberculosis. That it is a valuable adjunct to our diagnostic resources in the early and doubtful stages of tuberculosis, cannot be doubted, but further experience is required to determine its precise limitations; the conditions which influence and govern the reaction and the relative merits of the test as compared with ordinary hypodermic injection of tuberculin or the cuti-reaction of Pirquet.

We are now also investigating, but are not prepared to present any conclusions on the value of Millon's reagent as recently recommended by Mueller for the differentiation of tubercular from non-tubercular pus. This test, though of course, very limited in its application, is of interest to surgeons in the differentiation of pus obtained by exploratory puncture in various forms of visceral supuration, and especially empyema and cold abscesses in which the recognition of the tubercular nature of the infection is of the greatest prognostic importance.

DR. WEIL: The ophthalmo-tuberculin test appeals to me as a valuable diagnostic aid in suspected tuberculosis, if the negative or positive reaction can be interpreted as meaning the absence

or presence respectively, of tubercle. However, I would like to call attention to the fact that eyes have been permanently injured and even destroyed by application of the test. These accidents occurred in cases where the eye was previously diseased from other causes. It seems timely to warn those using the test to pay more attention to the condition of the eye used for the test, that such untoward results may be avoided. I readily agree that the test is harmless if the eye is sound.

DR. E. D. MARTIN: I have always been skeptical about new methods, and have on several occasions felt justified in my conservatism. I will admit that I was a convert to diphtheria antitoxin, but not until I was thoroughly convinced of its beneficial effects. I recall several years ago, when the Paquin serum was introduced, I was a member of the committee that drew up resolutions condemning this serum, but the resolutions were not accepted because my remarks were too caustic. In regard to Dr. Bass's experiments, I should like to know whether the reaction is absolutely a proof of tuberculosis, or can it occur in non-tubercular cases. Dr. Bass reports that the reaction has often been negative in surgical tuberculosis, and positive in cases of pulmonary tuberculosis. Is there any way of knowing whether the infection is old, recent, or in existence at the time of inoculation?

DR. ASHER: Upon listening to Dr. Bass's paper, I gained the impression that cured cases of tuberculosis yielded positive reaction to the test as readily as active cases. I would like to ask, then, what is the value of the test, if this is the case? I rather think the test is not at all what is claimed for it.

DR. BUTTERWORTH: I believe that the method is practical and good is to come. It is decidedly better than other methods, say the hypodermic. From a pediatric standpoint, it has been observed to be unsatisfactory and fatal, in that a latent tubercular infection was set up by the old method. Later the observation of Calmette was made. This new method of application holds out hope for the practical good. Wolf has made the observation that the reaction is absolutely without any benefit in infants below one year of age, and to be of little value in infants between one and two years of age. In twelve cases of typhoid, the reaction was positive in eight. I believe that practical good is to come of this method.

DR. BASS (in closing): I am aware of the necessity for caution in instilling tuberculin in the eye, and readily agree that there is danger in using any but a healthy eye for that purpose. In the extract of a recent paper by Caperson, I notice that the author says that it is perfectly harmless to a healthy eye, but cautions against selecting a diseased one for the test. In one case under his observation, trouble developed over a month after use of the tuberculin solution and in another, the test was used in the presence of glaucoma, with troublesome results afterwards. I would, therefore, say that the test should not be used when any disease is present. I used it in a case of granular lids, which gave trouble; but I will not do so again. However, in no instance where there was untoward results were there any serious developments.

As to the diagnostic value of the ophthalmo-tuberculin test, I am yet uncertain. We should tell the patient beforehand that a positive reaction does not necessarily mean that he has tuberculosis, and explain to him that the previous existence of the disease, though well long ago, will produce the same results. The most severe reaction I have seen was in a cured case. The patient had had pulmonary tuberculosis for six years previously. We may look upon the reaction as an expression of acquired immunity against tuberculosis, the tissues having, in the previous attack, been educated to resist tubercular toxin. During a tubercular infection the fluids and tissues of the body are constantly absorbing the incident toxins and react against this deleterious substance. In case of the positive reaction upon instillations of tuberculin into the eye, there is a specific determination of blood to the site of infection, for in the blood and lymph are carried the resisting elements. It is a true inflammation, and the organism behaves in just the same way as in inflammatory reaction against any infecting agent. In the test under consideration those subjects only which have previously sustained or are at the time under attack from tubercular infection, and have thereby acquired specific resistance against the offending agent, manifest inflammatory resistance.

Moribund cases do not afford the reaction, though they may have pronounced tuberculosis, simply because the vitality is at such a low ebb that the organism does not possess sufficient energy to insti-

tute inflammatory measures against the tuberculin. I tested two moribund cases. One gave no reaction. I would explain the different degrees of reaction this way: There are differences in the degree of previous immunity acquired by different individuals; hence, one who has become well immunized will give a pronounced reaction, while another, not so well protected, will manifest only a mild resistance.

I interpret a positive reaction to mean that the patient either has tuberculosis or has had it. It is, therefore, not of distinct service as a diagnostic aid except in the presence of the clinical symptoms of the disease in question.

Meeting of the Charity Hospital of Louisiana Alumni Association

FEBRUARY 1st., 1908. (ABSTRACT OF MINUTES).

The meeting was called to order in the assembly rooms of the Orleans Parish Medical Society. The president, Dr. Perkins, in the chair, with the following members present:

Parham, Martin, Gessner, Laurans, Danna, Matas, Simon, Lemann, Walet, Leckert, LeBeauf, Bohne, Wallbillich, Butterworth, Hummel.

The minutes of the previous meeting were adopted as read.

The treasurer, Dr. Leckert, submitted his semi-annual report, which showed a balance on hand, Feb. 1, 1908, of \$51.20.

Under the heading of Committee Report, Dr. LeBeuf, chairman of the "Committee on Increased Medical Representation on the Charity Hospital Board," reported having interviewed Governor Blanchard on July 16th last, in company with the other members of the committee, Drs. Martin and Lemann, in regard to placing another medical man on the Board of the Hospital when a vacancy should occur. The Governor received the committee courteously and concurred in the justice of their contention, but unfortunately was not then in a position to accede to the demand, strong pressure having been brought to bear on him in respect to two laymen for the next vacancy. In looking up the records of the Hospital, the Committee has found that, in the years 1880-1881, there were

three physicians on the board, thereby establishing a precedent for their contention. This will be called to the attention of the Governor-elect, with the view of having favorable action taken in the future.

On motion of Dr. Gessner, the Committee was thanked for its efforts, and ordered discharged.

The Committee on Hospital Organization, composed of Dr. Lemann, chairman; Drs. Guthrie and Oechsner submitted an elaborate report, based on statistics obtained direct from twenty-five hospitals in the United States in reply to letters of inquiry.

In concluding its report the committee recommended the adoption of the following resolutions, which on motion of Dr. Matas, seconded by Dr. Parham, were unanimously adopted as the sentiment of the association.

"Whereas, After a thorough investigation of the large hospitals of this country it has been found that practically the universal custom is to give the Visiting Staff much greater responsibilities and privileges than is the case in the Charity Hospital, and,

"Whereas, This Association embracing, as it does, most of the Visiting Staff of the Charity Hospital, is impressed with the benefit to the patients, the administration of the Hospital as well as to the Visiting Staff itself, to be derived from the enlargement of the duties and privileges of the Staff; be it

"Resolved, That this Association respectfully present this subject to the Board of Administrators of the Charity Hospital for their favorable consideration, and that it place at the disposal of the Board the information secured by the Committee on Hospital Organization; be it further

"Resolved, That the proper authorities be requested to post the existing regulations of the Charity Hospital, and to have them distributed to the members of the Staff so that they may be known to them; be it further

"Resolved, That in suggesting changes in the organization of the Hospital, this Association distinctly disavows any intention of disturbing the Sister of Charity in the Charity Hospital, and any hostility whatever to them: such disavowal being necessary because proposers of every reform are in certain quarters immediately set down as hostile to the Sisters; be it further

“Resolved, That these resolutions, together with the Committee’s report, be sent to the Board of Administrators.”

On motion, the Association offered the committee a vote of thanks for its efficient services, and ordered that a printed copy of the entire report be sent to each individual member of the Board of the Hospital. The Committee was also asked to continue in service until the next annual meeting.

The committee appointed to confer with the Board of Administrators of the Charity Hospital, with the view of securing the direct representation of the Visiting Staff of the Hospital in all matters concerning their official relations with that Institution, through representatives elected by the Staff, reported in detail, through its chairman, Dr. Matas. Besides the chairman, the Committee was composed of the following members: Drs. Gessner, Allen, Walet and Simon. The Committee, after recounting their successful efforts towards the early establishment of a “Conference Committee, of the Visiting Staff,” as outlined at a meeting of the Board, held Jan. 7, 1908, offered the following resolutions as embodying the full sentiment of the Association in this connection:

“Resolved, That the Alumni Association of the Charity Hospital of Louisiana congratulates the Board of Administrators of that Institution upon the adoption, on January 7, of the report of the special committee, of which Gen. Vincent was chairman, by which the Visiting Staff of the Hospital is given official recognition as consulting body through a representative ‘Conference Committee’ of its own election;

“That the Alumni Association regard this action of the Board as of paramount importance in promoting close, direct and more useful relations between the Administration and the Visiting Staff, thus meeting a long felt want in the Administrative and Medical Management of the Hospital.

“That the Alumni of the Charity Hospital hope that in carrying out the letter of the resolution proposed by Gen. Vincent, and his Committee, the purport and spirit of the resolution will be given most liberal and generous interpretation by the Administrators, just as the members of the Visiting Staff are also expected to collaborate with the Administrators with earnestness, zeal and fidelity in the exercise of their newly created functions.

"The Alumni of the Charity Hospital, in expressing their profound gratification at the laudable action taken by the Administrators on January 7, 1908, have only in mind the welfare of their parent Institution, and their desire to support the Administration in every step, which is conducive to this end."

On motion of Dr. Parham, seconded by Dr. Butterworth, the report, as a whole, was adopted, and the resolutions contained therein were ordered to be sent to the Board as the expression of the Association's sentiment on this important matter.

In addition, the Secretary, by a vote of the meeting, was instructed to inquire of the Administrators at their next meeting, when the resolutions adopted by them on Jan. 7, 1908, would go into effect, and in what manner the Visiting Staff would be called, in order to proceed with the election of the proposed "Conference Committee."

The question of the annual dues of the Association, next came up for discussion. In this connection, the president called attention to the fact, that for the past two years the Association has been compelled to face a deficit, after settling the account for the Annual Banquet. The cause of this is explained by the fact that the dues of each individual member is just sufficient to pay for his plate at the banquet, leaving only a small amount to meet the ordinary business expenses of the Association. Several plans were suggested by the members present to remedy this defect, and after much free discussion, pro and con, the following resolution, offered by Dr. Parham, was finally adopted:

"Resolved, That in the revision of the By-Laws, by the Executive Committee, the following clause be inserted for presentation at next annual meeting. That the annual dues be made One Dollar per year, to go into effect at the beginning of the next fiscal year. It was further

Resolved, That the distribution of the dues for this year be left to the discretion of the Executive Committee, the amount to remain at the present figure of \$5.00."

It was moved by Dr. Danna, and seconded by Dr. Laurans, that the time and place for the next annual banquet, also be left to the discretion of the Executive Committee.

The Association then adjourned.

SIDNEY R. SIMON, M. D., *Secretary.*

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The Charity Hospital Board and the Visiting Staff.

After a considerable agitation and a long wait on the part of those interested, the Board of Administrators of the Charity Hospital of New Orleans recently adopted resolutions establishing relationship between the visiting staff and the Board. This resolution reads as follows:

“That the members of the Visiting Staff of this Hospital be invited to select say, five senior members to be formed and designated ‘Conference Committee of the Visiting Staff with the Board of Administrators.’

The object and purpose of this committee will be to confer and consult with the Board of Administrators when called upon by the Board in all matters pertaining to their service.

The term, duration and the selection of a Chairman and such matters pertaining to organization to be regulated by them.

In view of the grave responsibilities of our House Surgeon, it is recommended that he be invited to participate in all joint conference meetings.”

This action on the part of the Board of Administrators is a response to the united effort of the visiting staff, their friends and the members of the Charity Hospital Alumni Association, made up of graduates from this institution. The careful reading of the resolutions would seem to admit the conclusion that the action of the Board is the mildest acquiescence to a concerted demand which they could by no possibility have ignored. It evidences some desire to satisfy the needs at the Hospital, and at the same time a reluctance to give full recognition to the actual merits of the case.

The Charity Hospital in New Orleans occupies an unique position among hospitals of the same size and class either in this

country or anywhere else. In most places the visiting staff is not only expected to be active in their relations and supervision so far as the sick in their services are concerned, but they are really made responsible for each patient admitted to the particular ward over which they exercise control. The house service is usually made up of temporary incumbents who have charge during the absence of the visiting staff, and in the intervals of their visits.

Until now, at the New Orleans institution, the practice has prevailed that the visiting staff should enjoy a passing interest in the services to which they are related and over which their influence prevails during the few hours of their actual contact with the service. In some instances a wider latitude is permitted, but even at times the interne under-graduates have been known to look after emergency conditions without consultation in any way whatsoever with the visiting physician or surgeon of the ward.

The action of the Board of Administrators is gracious in indicating the permission which allows the visiting staff to organize a "Conference Committee" which may be dignified with a title, and we trust that the Board of Administrators may occasionally remember the resolution sufficiently to call upon this Committee for some information "pertaining to their service". The resolution quite pointedly avoids anything which would convey the impression that the "Conference Committee" or the visiting staff should have any right to call upon the Board under any circumstances. Heretofore it has been difficult to get the grievances of the visiting staff before the Board, but we trust that the intention of the Board is not wholly conveyed by the literal interpretation of the resolution as adopted, but that it is meant that the Board has adopted these resolutions as a beginning in order to discover some better way through which an actual relationship should exist between the visiting staff and the Board.

We have before now called attention to the admirable system practised at the Tourq Infirmary, where, regularly before the meetings of the Board, the status of the visiting staff in the indoor and outdoor services is presented for criticism or commendation, and, while it is too much to expect that any such practise shall immediately prevail, we would suggest that the Board of Administrators of the Charity Hospital consider the method in vogue at

the other institution with the idea of some liberal public spirited and truly proletarian interest in the future administration of our great Charity Hospital.

Senn Memorial Services in Chicago.

Under the combined auspices of the several medical schools and societies of Chicago, including the Nicholas Senn Club, memorial services to the late Dr. Nicholas Senn were held in the Fine Arts Building, Chicago, on February 2.

The life of this distinguished member of the profession was reviewed by such able speakers as Drs. Frank Billings, Albert J. Ochsner, William E. Quine, Henry B. Favill, D. R. Brower and Prof. Albion W. Small. Each address was a tribute to the high intellectuality, to the supreme earnestness, and to the constant endeavor of Dr. Senn. The current of opinion as drawn from the several addresses showed that this great surgeon was as well a diagnostician, a pathologist, a physician, a literateur and a man who was as broadly democratic as he was humanitarian.

In his many wanderings Dr. Senn was a frequent visitor to New Orleans, where the present generation of his profession will remember him with a keen sense of appreciation.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In Charge of DR. F. A. LARUE, Assisted by DR. P. L. THIBAUT, New Orleans.

CONSERVATIVE SURGERY OF THE ARMS AND LEGS.—John Egerton Caunaday, surgeon-in-charge, Sheltering Arms Hospital, Hansford, W. Va., in a recent issue of the *Jour. A. M. A.* takes up the question of the conservative surgery of the arms and legs.

The author recognizes that the lack of hospital facilities, in time of war, materially militates against conservative surgery. Under ordinary conditions, however, he considers that amputation

immediately after the accident (except when the limb is held by a few shreds) is unnecessary and undesirable, inasmuch as it adds to the shock already produced by the injury sustained.

He advises the control of hemorrhage, the cleansing of the wound—not with antiseptic but with normal salt solution. He advocates the use of catgut in the suturing of bones and soft parts, so as to avoid the subsequent manipulation which would be necessary in the removal of unabsorbable material. For drainage he prefers the rubber tube. The methods of using solutions, dressings, etc., are described in detail. He further advises that the patient be put to bed, and that particular care be given to the improvement of his general condition, after which amputation is resorted to if necessary.

In support of his arguments in favor of conservatism the author cites a number of extreme cases treated in this manner with excellent results.

Department of Therapeutics and Pharmacology.

In Charge of DR. J. A. STORCK and DR. J. T. HALSEY, New Orleans.

THE VALUE OF MIXTURES OF FERMENTS.—“One of the most common mistakes made in prescribing ferments is to mix up several self-destroying ferments in the same preparation. It is well known that pepsin is destroyed quickly in an alkaline solution; trypsin is destroyed in a weak acid solution about as quickly; while the diastatic ferments are destroyed in an acid medium after a somewhat longer interval.

While the different experiments of Cannon and Grützner, and others, have shown that ptyalin digestion goes on in the immobile cardiac portion of the stomach for a period of several hours, this probably does not apply to either pancreatic or diastatic ferments introduced as medicine, because such substances are not thoroughly enough mixed with the food when administered, but are given at such a stage of the meal that they lie upon the outside of the bolus of food in the stomach.

Moreover, pepsin destroys trypsin, and trypsin destroys pepsin. There are other elements involved, such as the imperfect activation of the trypsin. and so on.

It will be seen that mixture of ferments is irrational and ineffective. Consequently, when a proprietary preparation is advertised as containing all the digestive ferments in an active form, such claims are made either to appeal to ignorance of gastrointestinal physiology in the practitioner, or from ignorance in the manufacturers themselves."—J. DUTTON STEELE, M. D., *Progressive Medicine*.
J. A. S.

CHOLELITHIASIS. PHYSICAL TREATMENT.—In a long article Schurmayer (*Therapeutische Monatshefte*) considers in detail all the physical agencies which may be used for this condition, and lays especial stress on their use after operation for the removal of stones.

For the stomach trouble which generally accompanies the condition he used electricity in the form of intragastric applications, and externally as electrical massage, the electrode being attached to the masseur's wrist. In some cases it is necessary to wash out the stomach with a weak solution of nitrate of silver, or if this is irritating, with chloroform water. The constipation is also treated with electricity and massage. The tendency to congestion of the liver is best combated by breathing exercises, which should never be neglected in the treatment of these conditions. The patient is shown to breathe so that the diaphragm will make the greatest excursion possible. The movement imparted to the liver in this way has more influence on its circulation than any other method of treatment. Other methods of physical therapeutics are taken up in great detail.—*The Therapeutic Gazette*.
J. A. S.

Department of Internal Medicine.

In Charge of DR. E. M. DUPAQUIER, New Orleans.

TREATMENT OF SYPHILIS WITH ATOXYL.—(G. Scherber, *Wien. Klin. Woch.*, and A. Lemierre, *Gazette des Hopitaux*). Results furnished by the treatment of syphilis with atoxyl at the Vienna clinic of cutaneous and venereal diseases, warrant the following conclusions:

Atoxyl (arsenic acid anylid) must be used in the form of a 10 per 100 solution, sterilized during two minutes at 100 C, and it must be always freshly prepared. Every other day 2 c. c. of this solution should be given by needle. While this dose will prevent intoxication accidents, yet it is necessary to carefully watch for idiosyncrasies. Atoxyl undoubtedly acts on all syphilitic exanthemata, on all cutaneous manifestations, from the papule to the gumma, inclusively; its action on the latter is even very remarkable. It also influences most favorably the lesions on the mucous membranes.

The action of atoxyl is closely similar to that of mercury; but, in general, at the dose it is given the medicament is less efficacious than mercury. Moreover, arsenic is rapidly eliminated, hence the short duration of its action. As no more than from 15 to 30 injections consecutively can hardly be employed, it happens that when the treatment is suspended, a relapse of the syphilitic manifestations occur.

In early malignant syphilis atoxyl acts favorably, but not more intensely, not more rapidly than mercury. Summing up, since atoxyl ameliorates most positively the powers of the patient, it can be used in the intervals or pauses of the mercurial treatment.

Atoxyl plasters, 10 per 100, are very active and are recommended in the local treatment of syphilitic cutaneous lesions.

THE BANANA IN THE TREATMENT OF DIARRHEA.—(Collin, *Gaz. heb. des Sc. Med. de Bordeaux*, and L. Gayard, *Gaz. des Hopitaux*.) Confronted by the slow and uncertain results obtained with the usual treatment of diarrhea, in general, namely, purges followed by mucilages, opium, antiseptics and astringents coincidentally with a milk diet, Collin, a surgeon in the French army. colonial division, resorted to the exclusive banana diet, on many occasions. Bananas are sterilized by thorough boiling and at the same time reduced to a pulpy cream, or purée. This treatment was pointed out to him by a physician from Java, who had treated it with success. In the absence of fresh milk, it is a good substitute in cases of diarrhea.

The quantity of banana cream or purée ordered varies from 300 to 1000 grams a day, according to the patient's appetite, with the addition at times of a small amount of light rice water or

lactic lemonade (2 per 100). In cases of simple acute diarrhea or uncomplicated chronic diarrhea, the banana cure works beautifully, but it barely acts favorably in severe cases complicated with dysenteric form symptoms. As soon as the banana cure is begun, the number of stools decreases, then constipation increases, the abdominal contractions are attenuated, they even disappear entirely, finally the general condition is bettered very rapidly.

The properties of the banana seem due to its richness in sugar and starch.

Department of Ear, Nose and Throat.

In Charge of A. W. deRoaldes, M. D., and Gordon King, M. D.
New Orleans.

SINUSITIS AS A CAUSE OF SARCOMA.—Goris, of Brussels, advances the theory that sarcoma of the superior maxilla may be due to prolonged suppuration of the antrum or the ethmoid cells. In support of this he reports three cases in which he was enabled to observe the development of sarcomata in the course of sinus suppuration. The analogy is not obscure between the accepted theory of the development of malignant neoplasms from traumatism or prolonged irritation, and their outgrowth from continued suppuration from a cavity, such as the antrum.

Goris does not, of course, consider the observation of only three such cases to be at all conclusive, but thinks it something more than mere coincidence. He offers this as an additional reason for advising the radical operation for the relief of chronic suppuration of the nasal accessory cavities.—*Société Belge de Laryngologie*, 1907.

SCLEROTIC OTITIS IN ITS RELATION TO ARTERIO-SCLEROSIS—Souleyre, in the *Presse Medicale* of July, 1907, reviews the question of the relation of middle ear sclerosis to general arterio-sclerosis, and concludes that oto-sclerosis should be considered as a symptom of the former condition. The causes of the two conditions are practically the same, and the association of the ear sclerosis with the general arterial change is too frequently observed to be coincidental. It is difficult to ascribe the changes that take

place in the middle ear to any other cause. The author advises for the treatment of oto-sclerosis the same general measures of diet, hygiene, etc., indicated for the arrest of arterio-sclerosis. In addition to which lumbar puncture, pilocarpine, and high frequency currents to lower the arterial tension.

Department of Ophthalmology.

In Charge of DRS. BRUNS and ROBIN, New Orleans.

OPHTHALMIA NEONATORUM.—(*Amer. Journ. of Obstets.*, July, 1907.) For the following very interesting abstract of Cragin's paper we are indebted to *The Ophthalmoscope*, December, 1907:

Cragin said that one of the burning questions of the day was how to reduce the number of those who go through life handicapped in the race, or perhaps a burden on the State, on account of an impairment or loss of vision, the result of ophthalmia neonatorum. The solution of this problem concerned the treatment of the baby's eyes immediately following its birth, and as various methods of treatment had been used by the writer in his service at the Sloane Maternity Hospital, and as each method had been followed in a series of one or more thousand confinements, the comparisons of the results of the different methods was of interest.

Before taking up the individual methods of treatment, the writer noted the following general propositions:

"1. A baby which is premature, and of low vitality, is more liable to ophthalmia than one which is mature and vigorous.

"2. On account of the dangers of contagion, babies congregated in a hospital are more liable to ophthalmia than babies under the same treatment and under the same obstetrician in private practice.

"3. The number of cases of ophthalmia in hospital service will vary somewhat with the class of cases admitted, but whatever the treatment employed, judging from the author's experience, a certain number of cases of ophthalmia will inevitably occur."

In the five methods of prophylactic treatment used by him at the Sloane Maternity, the smallest number of cases of ophthalmia

in one thousand confinements had been seventeen, the largest thirty-four. Hence, with the present known methods of prophylaxis, in a hospital service of fifteen hundred confinements per year, in which emergency and ambulance cases were received, one must expect from fifteen to twenty-five cases of ophthalmia in each one thousand confinements.

By ophthalmia is meant a purulent conjunctivitis. The objects desired were, *first*, to reduce the number of cases, and, *second*, to have the disease as mild as possible when it occurred.

In cleansing the eye it was his custom to flush the eye from the inner to the outer canthus with boric acid solution by means of a medicine dropper; the outer surface of the lids being then bathed in the same direction with the same solution.

During the last seven years the writer had used a prophylactic measure in five different series of cases, five different silver solutions: nitrate of silver, 2 per cent; nitrate of silver. 1 per cent; protargol, 5 per cent; argyrol, 10 per cent; argyrol, 20 per cent.

The results were as follows:

SERIES 1. In 1,000 confinements, 2 per cent nitrate of silver solution; cases of ophthalmia, 18; eyes lost, none; opacities, none.

SERIES 2. In 1,000 confinements, 1 per cent nitrate of silver solution; cases of ophthalmia, 34; eyes lost, 1; opacities, none.

SERIES 3. In 2,000 confinements, 5 per cent protargol solution; cases of ophthalmia, 53; average per thousand, 26+; eyes lost, 1; opacities, 1.

SERIES 4. In 2,000 confinements, 10 per cent argyrol solution; cases of ophthalmia, 34; average per thousand, 17; eyes lost, 1; opacities, 2.

SERIES 5. In 2,000 confinements, 20 per cent argyrol solution; cases of ophthalmia, 54; average per thousand, 21+; eyes lost, none; opacities, none.

During the use of the two per cent nitrate of silver solution, the irritation of the eyes with the accompanying edema and discharge, the so-called "silver catarrh", was so great that not only did it occupy a great deal of the time of the nurses in applying compresses and irrigating the eyes of babies, but it seemed to him to be a source of danger, not only by leaving an irritated eye which might later become infected, but also by causing in the ~~nur-~~

series discharging eyes, from which the discharge might be carried by nurses to healthy eyes, and thus the infection produced. For this reason, although no eyes were lost in this series, and as far as known, no opacities produced, the strength of the nitrate of silver solution was reduced from two per cent to one per cent.

The original cost of the argyrol solution was much greater than that of the nitrate of silver solution, but when one considered the greater straining and injury to towels, sheets, etc., and the greater demand upon the nurses in the use of the solutions of nitrate of silver, it had seemed to the writer that, viewed at the end of a year, the tax on the treasury of the hospital from the use of argyrol was but little, if any, greater than from the use of nitrate of silver.

The author detailed a series of very careful investigations concerning the bactericidal power of silver salts used in the different series. The tests were made with the *staphylococcus pyogenes aureus*, the *streptococcus pyogenes*, and the gonococcus. From the tests made it was evident that in the solutions usually employed argyrol had practically no bactericidal powers over the streptococcus or staphylococcus, but with the gonococcus, in strength of 20 per cent and 30 per cent, it was perfectly efficient. So long as a 20 per cent argyrol solution was efficiently bactericidal with the gonococcus in thirty seconds, so long as the gonococcus was the coccus most feared in the etiology of ophthalmia neonatorum; and so long as the clinical results were practically as good as with the use of two per cent nitrate of silver, and better than with the one per cent nitrate of silver, and this without the annoyances of silver irritation and staining, the writer felt justified in using and in advocating the use of argyrol as a prophylactic against ophthalmia neonatorum.

In the curative treatment of ophthalmia neonatorum, the writer had also found argyrol of great value. The absence of irritation in strong solutions, the fact that these solutions might be dropped into the eye at short intervals by the nurse without injury to the eye, and the fact that these solutions were bactericidal to the gonococcus, were all in its favor. The writer's present plan of treatment consisted of frequent irrigations of the eye with boric acid solution (every fifteen to twenty-five minutes during the stage of active purulent discharge), cold compresses, and the instillation of argyrol, 30 per cent every two to four hours.

Since the completion of the bactericidal tests referred to, the writer felt that, in spite of its many good qualities, argyrol left much to be desired in the treatment of ophthalmia when due to the streptococcus or staphylococcus. It was well known that some of the worst cases of ophthalmia were due to streptococcus infection, and it was hoped that in the near future a silver compound would be found which would possess the blandness of argyrol, and to be as germicidal to the streptococcus and the staphylococcus as was argyrol to the gonococcus. In the meantime it would seem wise, in severe cases of ophthalmia neonatorum, which resisted the treatment of argyrol, boric irrigations, and cold compresses, to make occasional use of nitrate of silver, one to two per cent solutions. The use of all silver compounds, even argyrol, may be continued too long, and the discontinuance of the silver solution, with the use of boric irrigations, might bring about a speedy recovery.

Miscellany.

TREATMENT OF PNEUMONIA AND INFECTIOUS DISEASES IN GENERAL WITH THE COLLOIDAL METALS.—(*Gazette Médicale de Paris.*) The employment of metallo-colloidal solutions (metallic ferments) being the order of the day, we give our readers a summary of the remarkable paper recently read by Prof. Albert Robin before the Academy of Medicine.

1st. After the failure of sero-therapy and etiological and pathological treatments, the therapeutics of pneumonia are reduced to a so-called armed expectancy, which is no more than medication of the dominant symptom. But, the study of the general and respiratory changes permitting us to seize upon at least a few of the modes of defense of the organism, and, at all events, one of the intimate mechanisms of the curative crisis, furnishes the elements of a naturistic treatment, according to the Hippocratic conception.

2d. At the moment of defervescence of pneumonia, discharges of urea and uric acid occur which often precede (*precritical discharges*) the fall of temperature, at the same time that the coefficient of utilization of nitrogen increases.

3d. These phenomena, far from coinciding with a parallel increase in the respiratory changes, progress as these latter diminish.

They do not need, therefore, the consumption of a larger quantity of oxygen.

4th. The spontaneous pneumonic crisis has, therefore, as one of its immediate conditions, if not as a cause, not acts of direct oxidation, but acts of oxireductive hydration which express the re-actional mode of defense of the organism against the pneumococcic invasion.

5th. The metallic ferments which increase the total nitrogen, the urea, uric acid, the coefficient of nitrogen utilization, while diminishing the total of consumption of oxygen, and which, consequently, increase, not the direct oxidations, but the acts of oxireductive hydration, act, therefore, in the same sense as the spontaneous curative effort of nature in pneumonia, and may serve to excite it, to increase it, or even to supply it.

6th. Observation has shown that they have no effect on the pneumonic lesion itself. They exert action only on the toxi-infectious element, and superpose upon vital and personal reactions of the organism a parallel activity which shows itself in a more rapid of the general correlative symptoms of this toxi-infection.

7th. They are, then, no more than one of the elements of the treatment of the disease, but they represent, in a way, the point around which the various indications group themselves.

8th. Besides these medications in the cases where they are called for, the treatment of pneumonia by metallic ferments calls for adjuvants, which are: phlebotomy, in certain cases, then calomel in broken doses, not to be repeated, alcohol in moderate doses, bimuriate of quinine in small doses combined with pyramidon after the fourth day of the disease; finally, a fly-blister from the fifth day on.

9th. The metallic ferments cause quite frequently a lowering of temperature, a special urinary reaction, and a slight increase of arterial tension.

10th. In fifty-three cases of pneumonia treated as above, there were only six deaths, or about 11 per cent. In 63 per cent of the cases defervescence occurred before the eighth day.

11th. The treatment seems to be less active in cases of grave secondary broncho-pneumonia. In thirteen cases, all of them grave, there were six deaths, or 46 per cent.

12th. The metallic ferments are administered in deep hypo-

dermic injections, in doses of ten cubic centimeters, or intravenously in doses of five cubic centimeters in very severe cases. The nature of the metal *seems* to be a matter of indifference. The injections should be begun from the fourth day on, and repeated about every second day.

13th. We may easily systematize, in current practice, the group of therapeutic procedures that constitute the complete treatment of pneumonia.

Robin and Bardet were the first to employ colloidal metals in therapeutics by injecting five cubic centimeters of a metallic solution, whether silver, palladium, or platinum. The following diseases have been treated in this manner: scarlatina, severe grippe, icterus gravis, articular rheumatism, typhoid fever, pulmonary tuberculosis. The good results of this medication are shown in the same phenomena as those enumerated for pneumonia. A. MCS.

Louisiana State Medical Society Notes.

In Charge of the Publication Committee,

Dr. P. L. Thibaut, Chairman: Drs. Homer Dupuy and Carroll W. Allen

IMPORTANT NOTICE.

We wish to call attention of the profession throughout the State to the visit of Dr. J. N. McCormack, General Organizer of the American Medical Association. It is Dr. McCormack's desire to address his remarks not only to the members of the medical profession, but particularly to the laity. We would, therefore, urge the members of the various parish societies to help Dr. McCormack in his work by being present and bringing all their friends to hear him. We publish below Dr. McCormack's itinerary:

Date.	Town.	Chairman.
March 16.....	Monroe	Dr. J. I. Newton.
" 17.....	Ruston	Dr. S. L. White.
" 18.....	Shreveport	Dr. J. C. Willis.
" 19.....	Natchitoches.....	Dr. J. S. Stephens.
" 20.....	Opelousas	Dr. E. Thompson.
" 21.....	Lake Charles	Dr. V. A. Miller.
" 23.....	Lafayette	Dr. F. R. Tolson.
" 24.....	Houma	Dr. J. B. Duval.
" 25.....	New Orleans	(To be appointed.)
" 26.....	Amite City	Dr. J. L. LeNoir.
" 27.....	New Orleans	(To be appointed.)
" 28.....	Baton Rouge	Dr. Charles McVea.
" 30.....	Alexandria	Dr. G. M. G. Stafford.

The annual meeting of the Louisiana State Medical Society will be held at Alexandria on May 12, 13, 14 and not May 13, 14, 15, as announced in last month's issue of the JOURNAL.

SABINE PARISH MEDICAL SOCIETY met at Many, Jan. 15, 1908. The meeting was called to order by the president, and roll call showed the following members present: J. M. Middleton, J. C. Porrett, Morgan Petty, T. L. Abington, T. B. Younger, W. C. Middleton. Minutes of previous meeting read and adopted.

In the absence of Dr. Petty at the first of the meeting, Dr. Henry presented a paper on the "Eruption, Care and Extraction of Teeth", which was discussed by the society.

Dr. Petty read a very interesting, lengthy paper on "Puerperal Sepsis", which was discussed by the society.

The society adjourned for supper at 6 o'clock.

T. L. Abington suggested that each member of the society write a personal letter to all legal practicing physicians in Sabine Parish inviting them to be present at our next meeting.

Letters from Drs. Dowling and Self were read by the secretary and discussed by the society.

Moved and carried that a copy of the minutes of this meeting be sent to the *Medical Recorder* published in Shreveport, also for a copy to be sent the N. O. MEDICAL & SURGICAL JOURNAL.

Dr. Henry (Dentist) was elected honorary member of the society.

There being no further business a motion prevailed to adjourn until the next regular meeting, to be held at Many, La., the first Wednesday in April, 1908. (W. C. Middleton, Secretary; J. M. Middleton, Pres.)

Medical News Items.

THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS announce that henceforth they will require proof of identification of all applicants for license who are not personally known to some member of the Board.

EXAMINATION BY U. S. CIVIL SERVICE COMMISSION.—The United States Civil Service Commission announces an examination on March 4, 1908, to secure eligibles for the position of Acting Assistant Surgeon, P. H. and M. H. S. for duty at St. John's

River Quarantine Station, Mayport, Florida, and other vacancies which may occur. For the specific vacancy mentioned applicants must be expert on yellow fever and persons immune to that disease will be given preference. The examination will consist of letter writing and the essential branches of medicine. Age limit is 20 years, or over, and the salary \$125.00 per month. The points for examination in Louisiana are Baton Rouge, Shreveport and New Orleans Customhouse. Boards of Pensioning Examining Surgeons located at these places will give further information.

REPORT OF THE SANITARY DEPARTMENT OF THE ISTHMIAN CANAL COMMISSION for December, 1907. This report shows a death rate for all employees of 18.11. The annual death rate for December, 1906, was 30.27 per thousand, making an improvement of nearly 12 per cent. for the past year. The report states that there were no cases of yellow fever, smallpox or plague anywhere on the Isthmus during the month. It has now been two years since yellow fever has disappeared from the Isthmus.

REMOVAL.—*American Medicine* has moved from Philadelphia, and now has its general offices at No. 84 William street, New York City; its publication offices at No. 189 College street, Burlington, Vermont. Dr. Frank Clark Lewis is the Managing Editor under the new regime.

MOVEMENT TO CHECK TUBERCULOSIS IN ILLINOIS.—Physicians throughout Illinois are urging the passage of the Glackin Bill, enabling cities and villages to establish public sanatoria for the treatment of consumption. The measure, which recently passed the Senate, and is now on second reading in the House, aims to arrest the progress of the disease by affording all communities a chance to combat tuberculosis by giving the latest scientific treatment free to all inhabitants afflicted with the disease.

THE SOCIETY FOR THE DESTRUCTION OF VERMIN is the name of a society recently organized in London. The object of this society is to bring about a general crusade against rats wherever found, on the ground that these animals are dangerous to the public health, and also injurious to many agricultural and commercial interests.

SMITHSONIAN INSTITUTION, HODGKINS FUND PRIZE.—In October, 1891, Thomas George Hodgkins, Esquire, of Setauket, New York, made a donation to the Smithsonian Institution, the income from a part of which was to be devoted to "the increase and diffusion of more exact knowledge in regard to the nature and properties of atmospheric air in connection with the welfare of man."

In the furtherance of the donor's wishes, the Smithsonian Institution has from time to time offered prizes, awarded medals, made grants for investigations, and issued publications.

In connection with the approaching International Congress on Tuberculosis, which will be held in Washington, September 21, to October 12, 1908, a prize of \$1,500.00 is offered for the best treatise that may be submitted to that Congress "On the Relation of Atmospheric Air to Tuberculosis."

The treatise may be written in English, French, German, Spanish or Italian. They will be examined and the prize awarded by a committee appointed by the Secretary of the Smithsonian Institution in conjunction with the officers of the International Congress on Tuberculosis.

The right is reserved to award no prize if in the judgment of the Committee no contribution is offered of sufficient merit to warrant such action.

The Smithsonian Institution reserves the right to publish the treatise to which the prize is awarded.

Further information, if desired by persons intending to become competitors, will be furnished on application to Charles D. Walcott, Secretary, Smithsonian Institution.

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH purposes to award for the year 1908-1909 scholarships and fellowships for work to be carried on in the laboratories of the Institute in New York City, under the following conditions:

The scholarships and fellowships will be granted to assist investigations in experimental pathology, bacteriology, medical zoölogy, physiology and pharmacology, physiological and pathological chemistry and experimental surgery.

They are open to men and women properly qualified to under-

take research work in any of the above mentioned subjects and are granted for one year.

The value of these scholarships and fellowships ranges from eight hundred to twelve hundred dollars each.

It is expected that holders of the scholarships and fellowships will devote their entire time to research.

Applications accompanied by proper credentials should be in the hands of the Secretary of the Rockefeller Institute not later than April 1, 1908. The announcement of the appointments is made about May 15. The term of service begins preferably on October 1, but may be begun at another time. Address L. Emmett Holt, M. D., Secretary, 14 West 55th Street, New York City.

THE AVOYELLES PARISH MEDICAL SOCIETY met in Marksville, January 9, 1908, with the following members present: Drs. E. Regard, F. A. Ray and G. Drouin, of Mansura; R. G. Ducoté, Bordelonville; E. Kiblinger, Plaucheville; A. L. Bardelon, Cottonport; G. R. Fox, Sam Mayeaux and S. J. Couvillion of Moreauville; Drs. Guirk, of Evergreen; Morgan, Woodside, and Drs. Tarlton, Couvillion, De Nux, Barbin and Saucier, of Marksville.

Dr. P. Jeansonne wrote a paper on "Diphtheria," which was read by Dr. Saucier and discussed by all physicians present.

The following officers were elected for this year: Dr. L. C. Tarlton, President, Marksville, La.; Dr. G. R. Fox, Vice-President, Moreauville, La.; Dr. R. G. Ducoté, Secretary and Treasurer, Bordelonville, La.

Dr. A. W. Martin, of Woodside, La., applied for membership and was elected.

The Society adopted a minimum fee bill for professional services rendered, and will have copies printed and distributed to every physician in the parish. R. G. Ducoté, Secretary and Treasurer.

THE EYE, EAR, NOSE AND THROAT HOSPITAL celebrated the inauguration of their hospital and new clinic building on February 22. This marks another stage in the development of this institution, which has so long and so well deserved the support and aid of the New Orleans and Louisiana public.

REORGANIZATION OF THE TERREBONNE PARISH MEDICAL SOCIETY.—This Society, at a meeting in Houma, La., on February 9, 1908, was reorganized with the following officers chosen: J. B. Duval, M. D., President; A. J. Delcourt, M. D., First Vice-President; R. M. Calmore, M. D., of Shriever, Second Vice-President; C. J. Menville, M. D., Treasurer; and A. P. Delcourt, M. D., Secretary. All the members of the medical profession of this parish are enrolled as members.

MEETING OF THE TRI-COUNTY MEDICAL SOCIETY.—This Society met at Hazlehurst, in Mississippi, February 11, with a good attendance. Several papers of interest were read.

CLIPPINGS.—At a recent meeting of the New Orleans Board of Education it was recommended that a physical director and medical inspector be appointed for the schools.

The State Medical Association of Tennessee contemplates establishing a State Journal.

Dr. J. P. Harrison has notified the JOURNAL that the postoffice at Windom, La., has been closed and all mail should be sent to Segura.

After an interval of ten years the publication of the "*New York Polyclinic Journal*" is to be resumed under the editorship of Dr. Charles H. Chetwood.

The Jefferson County Medical Society, on February 3, decided to protest the issuance of certificates to five physicians who are now practising in Beaumont, Texas, because of the discreditable and illegal methods pursued by these physicians.

PERSONALS.—At the annual meeting of the Charity Hospital Board, Dr. E. S. Lewis was re-elected Vice-President.

Drs. Neil and Christmas have been appointed physicians to the convict farms in Mississippi.

On January 11 Dr. A. W. DeRoaldes, of the Eye, Ear, Nose and Throat Hospital, this city, was made Commander of the Legion of Honor. His friends are highly gratified at this new honor accorded him.

Drs. R. P. and T. S. Jones, of Clinton, La., lost their offices by fire recently. These offices were over the Red Cross Drug Store, which was burnt.

Dr. J. N. McCormack, organizer of the A. M. A., is expected to deliver an address at the Health Conference in Alexandria, La., which takes place on March 31, and April 1 and 2.

REMOVALS.—Dr. A. E. Fisher changed from Dayline to Gayle, La.

Dr. W. E. Van Zant from New Orleans to Chatawa, Miss.

Dr. R. L. Long from Tally to Atlanta, Texas.

Dr. B. Nowlin has changed his location from Jonah to Georgetown, Texas.

Dr. R. C. Kemp has gone to Baton Rouge, from Echo, La.

Dr. H. W. Jarrell has moved from Arcadia to Homer, La.

Dr. J. W. Brandon from Ft. Adams to Woodville, Miss.

MARRIED.—On January 27, 1908, Dr. Albert Mayer and Miss Coralie Trautman, both of New Orleans, were married at the residence of the bride's parents.

Dr. L. A. Meraux and Miss Anita M. Maumus, of St. Bernard, La., were married on February 12, 1908.

DIED.—Professor Oskar Lasaar, of the University of Berlin, a dermatologist of international eminence, died on December 23, at the age of fifty-eight.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

Modern Medicine; Its Theory and Practice. In original contributions by American and Foreign Authors. Edited by WILLIAM OSLER, M. D., assisted by THOMAS MCCRAE, M. D. Vol. II. *Infectious Diseases.* Lea Bros. & Co., Philadelphia and New York, 1907.

The contributors to this volume of *Modern Medicine* includes the names of such men of Hektoen, Councilman, Dock, Koplik, Musser, James Carroll, and a number of other notables. In consonance with the method pursued in Volume I reviewed in this Journal, the subject matter has been exhaustively considered by individuals expert on each branch. The introductory chapter has been written by Dr. Hektoen who reviews the modern accepted theories of infectious diseases and their agents. There follow chapters on individual infectious diseases contributed by the several authors named. It would be difficult to select one which demanded more consideration than another, but, as a type, it would be worth while to review the able presentation of smallpox by Dr. William T. Councilman, who has identified himself with the study of the organism of this disease during the past decade. Not only is the pathological side of the subject admirably presented, but additionally the clinical features are brought out so clearly that it would seem that this article should stand out as an authority on the subject. Dr. George Dock writes the article on vaccination, and likewise discusses it from every viewpoint. Diphtheria, whooping cough, meningitis, pneumonia, septicemia, cholera, etc., are likewise admirably discussed.

It must be grateful to the American reader of this text to see the article on yellow fever from the pen of the late Dr. James Carroll than whom perhaps no one has been better qualified to write on this subject. His work is a monument to his genius, and his free reference to our various local authorities on this subject is evidence of the liberal spirit with which he worked.

No one who is abreast with advance in medical literature can afford to be without this admirable medical work in his library. DYER.

Osler's Modern Medicine. Vol. 3. *Infectious Diseases*, etc. Published by Lea Bros., Philadelphia and New York, 1907.

This volume, 3, of the theory and practice of modern medicine in original contributions by American and foreign authors, edited by Osler, assisted by McCrae, contains the infectious diseases continued from volume 2, and the diseases of the respiratory tract. The illustrations are instructive. We note plate 2, showing Bronchiectasis, wherein the pockets that fill and cause troublesome secondary septic conditions, are well exposed; also, plates 5 and 6, showing Pyopneumothorax on the left side and on the right side. To find, in this volume, the name of our editor, as a contributor, in such a company of eminent writers, is no surprise to

the reviewer, and it is, indeed, with great pleasure that he notes the article of Dr. Isadore Dyer, on Leprosy.

Only a few days ago, we stated how much we admired this great American text-book, and how much we felt encouraged in recommending it to our readers.

E. M. D.

Disorders of Respiration and Circulation. By VON NEUSSER. E. B. Treat and Company, New York, 1907.

This volume contains a clinical treatise on the symptomatology and diagnosis of disorders of respiration and circulation, by Prof. Edmund von Neusser, M. D., of the second medical clinic of Vienna. He is well known to us, on this side, as the associate editor of Nothnagel's Practice of Medicine. The book before us is an authorized translation in English by Andrew MacFarlane, M. D., of Albany, N. Y. The lectures therein contained accentuate the value of the study of symptoms as observed at the bedside of the patient, and reproduce the marvelous clinical pictures of our great masters in medicine, Trousseau, Niemeyer, Sydenham, Flint and others. Von Neusser himself is a modern clinician master.

E. M. D.

Report on the Origin and Prevalence of Typhoid Fever in the District of Columbia. Public Health and Marine Hospital Service of the United States, Hygienic Bulletin No. 35.

This exhaustive report by M. J. Rosenau, Director of the Hygienic Laboratory, with the collaboration of L. L. Lumsden and Joseph H. Kastle, including articles contributed by Ch. Wardell Stiles, Joseph Goldberger and A. M. Stimson, is a credit to American activity and earnestness.

The contents, being a series of monographs with accompanying charts and maps, are replete with original facts, figures and features; yet, nothing peculiar applies to Washington as a result of the investigations; it is pretty much the same thing as in other large places. During the period covered by the investigation 10 per cent of the cases were attributable to infected milk; about 15 per cent of the cases were imported; about 6 per cent were traceable to contact. This accounts for about 30 per cent of the 866 cases studied.

E. M. D.

The Cause and Prevention of Beri-Beri. By W. LEONARD BRADDON, M. B., B. S., F. R. C. S., State Surgeon, Negri Sembilan, Federated Malay States. Published by Rebman, Limited, London and New York.

The present work is an exhaustive report on the subject. No contribution of importance to the subject has been ignored; and wherever facts capable of standing as evidence have been found, they have been cited. The author has sought as far as possible to omit all mere opinions and to present the reader with the evidence of facts.

The author claims that in this book a problem which has vexed medicine for centuries receives solution, that the cause and prevention of beri-beri are clearly and certainly shown.

The grain intoxication theory is granted, and it is specifically a rice intoxication. The discussion on these points, and also on the nature of the toxic agent is remarkably set forth. The conclusion of the work is a triumph of prophylaxis. Avoid the use of rice or its extract and the disease will not appear.

Where rice cannot be abandoned, where it is the staple food, all that is necessary is to avoid the use of uncured rice (stale cleaned white) rice to eat only the fresh or cured sort. The State should prohibit the sale of any rice which is not either freshly made, or which has not been cured by boiling or heating in the husk before stripping it. E. M. D.

Heart Disease and Blood Pressure. By LOUIS FAUGÈRES BISHOP, A. M., M. D. E. B. Treat and Company, New York.

The second edition of this work, which is a practical consideration of theory and treatment, contains further conclusions derived from the author's special attention to the subject. The "Vessel tone-maintaining Function of the central nervous system" is a physiological doctrine which does not appear in the literature of the day, but which would seem the key to the explanation of a large number of cases. While the author believes he is not, probably, the first one who ever had this in mind, yet, he assumes, and justly so, it seems to us that he exposes the theory so clearly that the statement of it makes it his own. The chapter on hypertonia vasorum idiopathica is a discussion of the clinical application of the theory to an important class of cases. The book contains well known articles that had been published in many Journals from the pen of this original worker and thinker in heart and circulation pathology. E. M. D.

Practical Therapeutics. By HOBART AMORY HARE, M. D., B. Sc., etc. Lea Bros., Philadelphia and New York.

This is the twelfth edition of the well known text-book. It has been enlarged, thoroughly revised, and largely re-written. It is illustrated with 114 engravings and 4 colored plates. It retains its original character, viz.: especial reference to the application of remedial measures to disease and their employment upon a rational basis. More complete information is given as to *Materia Medica* than ever before. Recent advances in therapeutic procedure have been introduced. The value of sodium citrate, calcium lactate, citric acid, etc., each in their respective field, has been emphasized. The merit of the book is indisputable. E. M. D.

Practical Diagnosis. By HOBART AMORY HARE, M. D., B. Sc., etc. Lea Bros. & Co., Philadelphia and New York.

The sixth edition of this well-known text-book, now before us, has been revised and enlarged. It is illustrated with 203 engravings and sixteen plates. It is designed to deal chiefly with the diagnosis of disease by means of the symptoms presented by the patient, and takes up laboratory methods only in those cases in which they are essential to arriving at correct results, as, for example, in the examination of the blood and the urine. On the frontispiece these words of warning are written: In the diagnosis of a given disease it is essential that the physician rest his opinion not upon one or two symptoms, but upon a series of symptoms which when properly put together give him a complete, or nearly complete, picture of the malady. It is as futile for a physician to attempt to base a diagnosis upon one symptom as for an architect to determine the appearance of a house by seeing one of the stones which has been removed from its wall. E. M. D.

Publications Received.

G. P. PUTNAM'S SONS, New York and London, 1908.

The Prolongation of Life, by Elie Metchnikoff. The English translation edited by P. Chalmers Mitchell, M. A., D. Sc.

Christian Science; The Faith and Its Founder, by Lyman P. Powell.

P. BLAKISTON'S SON & CO., Philadelphia, 1907.

The Theory and Practice of Hygiene (Notter-Firth). Revised and largely rewritten by F. H. Firth. 3d Edition.

D. APPLETON & CO., New York and London, 1908.

Gonorrhea; Its Diagnosis and Treatment, by Frederick Baumann, Ph. D., M. D.

THE YEARBOOK PUBLISHERS, Chicago, 1907.

The Practical Medicine Series. Head. Vol. X. *Nervous and Mental Diseases*. Edited by Hugh T. Patrick, M. D., and Charles L. Mix, A. M., M. D. Series 1907.

MISCELLANEOUS.

Report of the Department of Sanitation of the Isthmian Canal Commission for the Month of November, 1907, by Asst. Surg. Gen. W. C. Gorgas, U. S. A. (Washington, D. C., Government Printing Office, 1908.)

Orleans Parish Medical Society Proceedings, 1907. (Published by The L. Graham Co., Ltd., New Orleans.)

Reprints.

The Treatment of Chronic Valvular Disease of the Heart; (2) The Medical Use of Carbonic Acid, by Dr. Thomas E. Satterthwaite.

Treatment of Ununited Fractures of the Neck of the Femur, by the Use of Coin Silver Nails, by Dr. H. Augustus Wilson.

MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Report of the Board of Health of the City of New Orleans,
FOR JANUARY 1908.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	4	3	7
Intermittent Fever (Malarial Cachexia)	1	2	3
Smallpox.....			
Measles.....	2		2
Scarlet Fever.....	1		1
Whooping Cough.....	1		1
Diphtheria and Croup.....	3	1	4
Influenza.....	30	16	46
Cholera Nostras.....			
Pyemia and Septicemia.....	1		1
Tuberculosis.....	49	35	84
Cancer.....	18	7	25
Rheumatism and Gout.....			
Diabetes.....		1	1
Alcoholism.....	5	1	6
Encephalitis and Meningitis.....	5	1	6
Locomotor Ataxia.....	3		3
Congestion, Hemorrhage and Softening of Brain.....	17	14	31
Paralysis.....	3	4	7
Convulsions of Infants.....		1	1
Other Diseases of Infancy.....	25	7	32
Tetanus.....	2	3	5
Other Nervous Diseases.....	3	1	4
Heart Diseases.....	54	40	94
Bronchitis.....	18	9	27
Pneumonia and Broncho-Pneumonia.....	36	32	68
Other Respiratory Diseases.....	7	1	8
Ulcer of Stomach.....			
Other Diseases of the Stomach.....	8	4	12
Diarrhea, Dysentery and Enteritis.....	10	10	20
Hernia, Intestinal Obstruction.....	1	2	3
Cirrhosis of Liver.....	12	6	18
Other Diseases of the Liver.....	1	1	2
Simple Peritonitis.....	2		2
Appendicitis.....	1	1	2
Bright's Disease.....	35	27	62
Other Genito-Urinary Diseases.....	3	6	9
Puerperal Diseases.....	4		4
Senile Debility.....	18	18	36
Suicide.....	6	1	7
Injuries.....	11	19	30
All Other Causes.....	10		14
TOTAL.....	410	278	688

Still-born Children—White, 22; colored, 24; total, 46.

Population of City (estimated)—White, 258,000; colored, 93,000:
total, 351,000.

Death Rate per 1000 per annum for Month—White, 19.08; colored,
35.07; total, 23.52.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 30.10
Mean temperature 53.
Total precipitation 4.50 inches.
Prevailing direction of wind, north

*Paullum seculi distinetur
Celata virtus. — HORACE.*

New Orleans Medical and Surgical

Journal

ESTABLISHED IN 1844.

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APRIL, 1908.

NEW ORLEANS
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JOURNAL.

(Established in 1844.)

Official organ of the Louisiana State Medical Society
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SAMPLES AND LITERATURE ON REQUEST.

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Destroys Micro-Organisms

New Orleans Medical and Surgical Journal.

VOL. LX.

APRIL, 1908.

No. 10

Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a WRITTEN order for the same accompany the paper.)

Non-Gonorrheal Prostatic Disease in Young Men, and its Reflexes.*

By DR. CARROLL W. ALLEN, New Orleans, La.

I have been prompted to write this article after frequent discussions with medical friends who have questioned the possibility of the existence of prostatic disease in young men, except as a sequence to gonorrheal infection, or the result of tubercular or other specific cause.

That serious prostatic disturbance can occur in subjects entirely free from any past gonorrheal taint or other specific infection, is probably not generally known. In looking over my notes I find several cases illustrative of this point; I will refer to these and while discussing them will have something to say about the symptoms and reflexes arising in prostatic disease generally, and in the parts adjacent thereto, the seminal vesicles and neck of the bladder.

*Read at meeting of Orleans Parish Medical Society, Feb. 8, 1908.

Two of these cases, the subjects of chronic prostatic congestion, with a long train of reflex symptoms, and the third, with chronic catarrhal prostatitis, in all of whom earlier gonorrheal infection can, with reasonable certainty, be eliminated, both by their histories and as the results of examinations.

Report of Cases.—I was called Apr. 24, '07, to see Mr. R., *Aet* 35, single, paperhanger. He had been in bed four days suffering from backache, headache and vague gastric and abdominal disturbances which he had attributed to indigestion. Occasionally there was a peculiar pain in his rectum and at times an ache and sensation of weight in his thighs. He had become very nervous, lost his appetite and fallen off much in weight, and lately had suffered from insomnia. These symptoms had been developing for the past six months, the backache the most constant and trying of them all, had finally driven him to bed.

He denied all history of gonorrhea, syphilis, or any other sickness of consequence; used tobacco moderately, and alcoholics rarely. Sexual intercourse about once a week.

Careful examination revealed nothing, except a double inguinal hernia, which gave him no trouble, until the rectum was examined when a prostate as large as a mandarin orange was encountered, very sensitive to the touch. Under gentle prostatic massage and hot rectal douches he was soon out of bed with all symptoms much improved, and able to call regularly at my office for treatment, when his urethra was examined and found normal. The urine contained no shreds, but a trace of albumin. Examination of the expressed mucus from his prostate, which was clear, showed no gonococci.

The subsidence of the enlarged prostate was rapid. After eight weeks no further treatment was necessary, the patient having gained 15 pounds in weight, ate and slept well. His backache and other symptoms having disappeared as well as the albuminuria. The rapid subsidence of these symptoms, which were rather severe, bears out the non-gonorrheal origin of the trouble, a simple chronic congestion.

R. *Aet*. 29, warehouseman; first seen at the Polyclinic Apr. 20, '07. Negative history of gonorrhea and syphilis and of moderately

good habits. Had been suffering from severe backache for several months. Stooping down, bending forward or any change of position using the lumbar muscles caused severe aching in the lumbar region. Urine examination for shreds and albumin negative. Urethra normal. His prostate was slightly enlarged and very hard, but not sensitive. No mucus could be obtained for examination. The backache which he had when he entered the clinic disappeared after massage, and did not return for several hours. This treatment, with irrigations and instillations, was practiced twice a week for about five weeks, when he felt no further need for treatment.

Mr. S., a frail, anemic young man *Aet* 21, of negative gonorrheal history. Does not smoke or drink. Admits rather excessive sexual indulgence for a man of his physique, and during his younger days had been guilty of misusing himself rather frequently in other ways. He had been suffering for past two years with occasional backache, at times severe, pains in bladder with frequent urination. Pains in back of thighs, up the spine and in back of head. Gastric disturbances and cardiac palpitation, cough and other lesser symptoms. In addition he had a chronic nasal and pharyngeal catarrh of long standing.

Examination negative until the genito-urinary apparatus was reached. First and second urines contained a few shreds and flocculi. Posterior urethra very sensitive to a sound. Prostate slightly enlarged and irregularly nodular, and very sensitive.

Several large flocculent mucous masses were expressed by massage, which gave negative results when examined for gonococci on several occasions.

He was given a quinin and iron tonic and massage practiced on his prostate twice a week, with occasional silver nitrate instillations. After several weeks he began to improve subjectively and objectively; the diseased mucus slowly disappearing from his prostate and he regained a snap and vigor he had not known for several years. After five months he was discharged well and much improved physically, nearly all of his reflex symptoms having entirely disappeared.

This was a case of simple catarrhal prostatitis in a young man

predisposed to catarrhal troubles. Catarrhal affections of the prostate in these subjects are frequently very resistant to treatment, often as much so as their nasal and pharyngeal affections. and when of gonorrheal origin prove much more stubborn.

The history in this case is particularly interesting. His earlier self abuses and sexual excesses chronically congesting his prostate, which easily became catarrhal in a subject of his tendencies.

Aside from gonorrhea the most potent causes of prostatic congestion or catarrh are excessive venery and masturbation. Any causes which favor pelvic congestion also affect the prostate as constipation, hemorrhoids, excessive use of alcoholics and exposure to damp and cold.

Prostatic congestion having occurred, and its cause continuing, it may remain indefinitely as such, or result in chronic catarrhal prostatitis, as a rule a much more serious and intractable condition once it has become firmly established.

The more I see of the subjects of prostatic disease, the more I am inclined to compare them to women with uterine affections. The entire prostate, while not the analogue of the uterus, the sinus pularis representing that organ, is nevertheless capable of giving rise to all that long train of reflex and nervous symptoms that we see in the subjects of chronic uterine disease. The prostate is richly supplied with nerves from the sympathetic, the great reflex nerve, the abdominal brain of Byron Robinson, with all its vast connections ready to signal its disturbances by reflexes many and varied. To conceive a full appreciation of the possibilities of prostatic reflexes, one has but to consider the tremendous shock that sometimes follows such a simple procedure as catheterization; when disturbances occur during the passage of a catheter they do not usually take place until the prostate is reached, when shock may be immediate and profound. I know of a case having been carried almost to the brink of the grave as the result of such shock, this particular experience occurring in an old man with an hyperthrophied prostate. Massage of this organ is frequently productive of shock, occasionally patients will faint when it is too vigorously or imprudently practiced. If there is one thing that the prostate is well supplied with, it is nerves.

When diseased the symptoms usually begin locally, with a sense of perineal uneasiness or rectal pain may be some sexual hyperesthesia and a few pains in the back of the thighs, later on in the lumbar region, frequently very severe here, often incapacitating the subject from work and prompting the use of kidney plasters and remedies for lumbago. The sexual hyperesthesia may later give place to irritable weakness, and then to impotency, and we have a typical picture of the sexual neurasthenic; "the prostate is the sexual heart." As the reflexes continue the nerve paths become more easily traveled, the symptoms reaching further and further like the tentacles of the octopus drawing in its victim. The stomach finally reached, adds to the list of symptoms its quota in nervous dyspepsia, the spine and head come in for their part and we have the picture of a general neurasthenic to be seen every day in our large G. U. clinics or drifting to other services, the original trouble having been forgotten or largely eclipsed by the great array of other complaints; symptoms to be duplicated only in the chronic gynecological patient.

The neurotic element in the individual greatly favoring the development and persistence of these symptoms.

I have seen all of this happen often in subjects of prostatic disease, both of gonorrheal and non-gonorrheal origin. These cases usually of milder degree than the picture drawn above, have occurred so frequently in my practice in the last few years that I have begun to look upon backache and other similar complaints in young men, without apparent cause, as an indication for careful prostatic examination.

Excision of Shoulder in a Case of Old Unreduced Dislocation.*

By HERMAN B. GESSNER, M. D., New Orleans, La.

I. G. T., aged 18 years, came to me from Avoylles Parish on December 2, presenting a subcoracoid dislocation. This had resulted from the kick of a horse four and one-half months previous, and had, to a great extent, thrown his left upper extremity out of

*Read at meeting of Orleans Parish Medical Society, Feb. 22, 1908.

use, the range of motion and power of the limb being greatly reduced. I applied adhesive strips to the internal and external aspects of his arm, and through them made extension with 15 lbs. of weight. On the following day, under ether, I attempted to reduce the dislocation by the Kocher method, but failed to effect reduction after repeated efforts. The heel-in-the-axilla method was considered and rejected, as I feared the force that could and would be applied in this manner would seriously endanger the vessels and nerves of the axilla. An incision was made along the groove between the pectoralis major and deltoid, following the suggestion of Andrews, quoted in Vol. 11 of Keen's system of Surgery, and the tendon of the pectoralis major divided near the humerus. Attempts were then made to replace the humeral head, first by manipulation through the wound, then by repeating the Kocher movements. These attempts also were unsuccessful. The capsule of the joint was then incised. The glenoid cavity could be felt patent, not filled by exudate, as might have been expected. In fact, no explanation was forthcoming, for the difficulty encountered except the contraction of the muscles during the four and one-half months that had elapsed since the accident. I may mention here that the humerus seemed not to have split and pierced the capsule, but to have pushed it before and separated it from the anterior aspect of the glenoid segment of the scapula. Believing that to close the wound and have the humeral head where it was would be to leave the patient not only as ill off as before, but probably worse off because of the exudation and adhesions which would follow the traumatism, I decided to excise the head of the humerus subperiosteally. Section through the anatomical neck, which showed a condition of bone rarefaction or osteoporosis from disuse, left too long a humerus, one that could not be brought into proper relation with the glenoid and would not have allowed the increased mobility desired. I therefore made another section through the surgical neck, this again showing osteoporosis. Even then the humerus shaft fitted rather tightly under the glenoid segment, the contracted muscles keeping it in adduction. However, this was allowed to stand. The wound was now closed, the pectoralis major being sutured and provision made for drainage.

Moderate infection followed. At the end of three weeks the wound had filled to the surface. At this time massage and passive motion were begun, as well as faradic stimulation of the atrophic deltoid. The patient was encouraged to use the limb for ordinary purposes, as well as to exercise with dumb-bells. Improvement from this time on was rapid.

When last seen on January 24, not quite eight weeks after operation, the lad was using his arm freely, having a far greater range of motion and far more strength and power than before the resection. I believe it safe to predict that in the course of time, considering the subperiosteal character of the operation and the length of humerus remaining, his left limb will be very nearly as useful as the right.

COMMENT: The point of interest in this case report is of course the matter of choice of procedure when the attempts at reposition had failed. It must be evident that excision of the shoulder was the next step indicated, such an operation, done with the least sacrifice of bone, and without loss of ligamentous, muscular or tendinous structure, promising mobility and strength in the resultant limb.

Report of Ten Cases of Gunshot Wounds of Abdomen, Treated Without Operation.*

By E. DENEGRE MARTIN, M. D., New Orleans, La.

Notwithstanding the fact that all surgeons are agreed to-day that penetrating wounds of the abdomen, especially in the region of the umbilicus, should be explored, experience in the recent wars shows that this rule should apply only when surrounded by the best aseptic precautions, and I might add by an experienced surgeon only. Stephenson's observations during the South African war have had much to do in modifying this opinion. Although nearly all text books lay down sets of rules by which we should be governed in diagnosis and operation for abdominal wounds, the exceptions are so numerous that one must be directed more or less by the existing symptoms. Frequently non-penetrating wounds

*Read at meeting of Orleans Parish Medical Society, Feb. 22, 1908.

cause more pain and shock than penetrating wounds, and a penetrating or perforating wound will give few symptoms of import.

My attention has been called recently to the number of recoveries we have had in the colored female surgical ward of the Charity Hospital from gunshot wounds of the abdomen, not operated upon—the mortality amounting to 10 percent—whereas in a series of 113 cases reported by Dr. E. D. Fenner, in 1902, of cases operated upon, the mortality was 69 percent, and others have reported a mortality as high as 64 per cent. A brief review of these cases is well worth considering, and I am making a preliminary report, with the intention of looking further into the statistics of the Charity Hospital, with the idea of comparing cases operated upon with those not operated upon, and by an analysis of these, to learn, if possible, the cause of the results.

The following cases were all treated in Ward 36, Charity Hospital:

1. Easter Evans, (recovery) age 39, admitted July 1, 1905, discharged July 23, 1905. Diagnosis: Perforating gunshot wound of chest and abdomen. Patient was shot on day of admission with a revolver, one bullet entering chest; another bullet entered back just beneath 12th rib and 2 inches to right of median line. The wound of exit just below ensiform cartilage. When admitted, patient was very weak, shocked; pulse rapid, weak.

Treatment: Stimulation; morphia; nothing by mouth for 4 days; ice bag to abdomen.

2. Lilly Rallins, age 30. Admitted February 23, 1906, discharged March 28, '06.

Diagnosis: Penetrating gunshot wound of thorax and abdomen.

On day of admission, was shot with 38 calibre revolver. Point of entrance in left side of chest in 7th interspace $3\frac{1}{2}$ inches in front of mid axillary line. Wound of exit $11\frac{1}{2}$ inches to right of first lumbar spine. When admitted, pulse weak, slight vomiting, decided peritonitis; hematuria.

Treatment: Nothing by mouth for 48 hours; morphia; stimulation.

3. Kate Young, age 25. Admitted February 12, 1907, discharged March 10, 1907.

Diagnosis: Penetrating gunshot wound of abdomen. Patient tried to commit suicide by shooting herself in abdomen, the bullet entering just below tip of ensiform cartilage. No wound of exit.

Treatment: Nothing by mouth for 24 hours; morphia; stimulation; ice bag.

4. Olivia Oneal, admitted December, 1907, discharged January 1, 1908. Diagnosis: Penetrating gunshot wound of abdomen. On day of admission was shot with revolver; wound of entrance in right side just above costal border; no wound of exit.

Symptoms: Abdominal pain and rigidity; tenderness.

Treatment: Nothing by mouth for 48 hours; morphia, rectal irrigation.

5. Lula Rush, age 24. Admitted August 26, 1907, discharged September 8, 1907. Diagnosis: Penetrating gunshot wound of abdomen. On day of admission patient was shot in right lumbar region of abdomen. No details given.

Treatment: Ice bag; nothing by mouth, morphia.

6. Lula Brumfield, age 26. Admitted January 26, 1908. Diagnosis: Penetrating gunshot wound in abdomen. One day previous to admission patient was shot with No. 8 bird shot at short range. The load of shot tore away tip of right elbow and entered the right side about one inch above crest of ilium. A large rent in cecum, fecal fistula resulted. Symptoms: Localized peritonitis.

Treatment: Nothing by mouth; ice bag; morphia.

At present time fecal fistula has closed, and patient will make uneventful recovery.

7. Lula Parker, admitted January 6, 1908. Diagnosis: Penetrating gunshot wound of abdomen. Two days before admission, patient was shot with large calibre revolver at close range. The bullet entered $2\frac{1}{2}$ inches below and 1 inch to right of umbilicus. X-ray shows bullet to be resting in left iliac fossa. No wound of exit.

Symptoms: Shock; pulse weak, shallow, rapid; general rigidity and tenderness of abdomen.

Treatment: Nothing by mouth for three days; ice bag; morphia; stimulation. At present patient has tumor on left side with possible localized abscess; now sitting up.

8. Cora Wallace, age 23. Admitted February 1, 1908. Diagnosis: Penetrating gunshot wound of abdomen. Patient was shot with revolver at short range on night of admission. Bullet entered left side just beneath costal border. Symptoms: Tenderness in left side of abdomen; slight rigidity; vomited two or three times; pulse weak, shallow, rapid.

Treatment: Nothing by mouth for 4 days; ice bags; morphia; stimulation.

9. Elizabeth Hinson, age 65. Admitted September 13, died on Sept. 19, 1907, of hypostatic pneumonia. On day of admission patient was shot in abdomen, bullet entering just below and to right of umbilicus; no wound of exit.

Treatment: Nothing by mouth; ice bag; stimulation; morphia. No bedside notes obtained. Patient died Sept. 19, '07. Diagnosis: Penetrating gunshot wound of abdomen and hypostatic pneumonia.

10. Melvina Peters, age 27. Admitted October 21, 1907, died October 22, 1907. Diagnosis: Perforated gunshot wound of abdomen. On day of admission, patient was shot with a Springfield rifle at close range. Bullet entered abdomen just to left of umbilicus and made its exit in left lumbar region of back.

On admission, shock; abdominal pain; rigidity, tenderness; tympanitis.

Treatment: Nothing by mouth; morphia; no stimulation; ice bag. Patient died 26 hours after admission. Evidently condition on admission was too bad to warrant surgical interference.

For these histories I am indebted to Mr. Lafferty, resident student of the Charity Hospital. Their incompleteness is due to no fault of his, and this is unfortunate, as we have little data from which to draw conclusions, but I am convinced that there is something well worth looking into, when we find the mortality in the cases operated upon so great it makes one hesitate what would probably be best to do with these patients. I trust that in my next report I shall have found something more tangible upon which to base some conclusions.

Cause and Management of Infection of the Extremities.*

By DR. L. SEXTON, New Orleans, La.

The term infection applies to morbid condition caused by the entrance and growth within the body of pathogenic micro-organisms, and to the act or process by which disease is thus produced (Keen).

The term infection is applicable alike to wounds which contain bacteria, and to conditions in which the germs enter into the circulation of the blood. The pyogenic infections result in sapremia, local or in septicemia when the germs enter the circulation. When arrested in internal organs, as the liver, spleen, or in the lymphatic glands, producing abscesses, we have the condition known as pyemia or metastatic abscess, but it is not with this more serious phase of the trouble with which this paper has to deal, as it is intended to offer some suggestions in the treatment or management of ordinarily infected wounds of the extremities.

Bacteria enter the system through the mucous membrane and abrasions of the skin. The abrasion may not be larger than a pin point or a hair follicle. If the phagocytic action of the patient is reduced by disease or decreased by the virulence of the germs, the consequence is more serious. When the infecting germs remain localized and the ptomains are only absorbed, it produces a condition known as bacterial intoxication. The infection following these abrasions to the skin are termed pyogenic or non-specific infections. They result in inflammatory reaction, which produce the molecular death of the part, ulceration, gangrene, or in liquefaction of tissue and inflammatory material resulting in pus or suppuration, or when properly treated at first by rest and large wet antiseptic gauze applications, or hot drip, it may result in resolution.

The above described process is the pathological story of the ordinary acute abscess or infection. After the pus has become circumscribed and evacuated, there is very little left to be done, but when these organisms invade the cellular tissue, producing toxæmia, or when the bacteria invade the blood stream and become

*Read at meeting of Orleans Parish Medical Society, Feb. 22, 1908.

lodged in different internal organs or glands, giving rise to metastatic abscess, pyemia or septicemia it is quite a different proposition.

These are the conditions that the surgeon has mostly to fear, and it should always be remembered that the severest attack of these troubles had for its beginning a very trivial cause.

The staphylococcus pyogenes is found practically everywhere that microorganisms are capable of existing, but its presence in numbers in the atmosphere, under finger nails, upon the skin, within the cavities of the body, and upon the many objects and tools coming in contact with persons, makes this organism of special interest to the surgeon. It is estimated that fifteen per cent of all germs found in the atmosphere of amphi theatres and hospital wards are the staphylococci pyogenes aureus. This variety of organisms is not so frequently found in the ordinary water about premises. It is known as the pus germ, and is the cause of perhaps 90 per cent of abscesses and infections. It is nearly always found as one of the germs in all mixed infection. The staphylococcus pyogenes aureus penetrates the epithelium, through the hair follicles, or through abrasions of the skin. The sweat glands are not often involved, but the osseous system is frequently invaded. Pustulæ, acne, furuncles, boils are produced by the staphylococcus. The same germ is at the bottom of most suppurative cases following operations.

Streptococci also have a very wide dissemination in the atmosphere and is the cause of hospital wards becoming infected with erysipelas and other severe infectious diseases. Surgeons coming in contact with this germ may convey them from the hospital under their finger nails or on their instruments, and may thereby infect the next patient whose wound they dress, provided the most thorough asepsis has not been practiced.

Streptococci are found upon the skin of our bodies, in the nostrils, upon the tonsils, within the cervix uteri and many other portions of the anatomy. They have been found in the blood and urine when no general infection was present.

The prominent feature of the streptococci is the production of hemolysin, a non-poisonous substance which has the property, how-

ever, of dissolving red blood corpuscles. The streptococci is highly pathogenic. It is the cause of erysipelas, furunculosis, abscess, lymphangitis, angina, phlegmon, tonsilitis, enteritis, septicemia, pyemia, osteomyelitis, rheumatism and myelitis (Keen). It is often associated with mixed infections as diphtheria, scarlet fever, tuberculosis and other infectious diseases.

The bacilli *erysipelatus* streptococci are the same germ; they produce infections or erysipelas, according to a not well understood factor or differing resistance of the individual patient, size, location and depth of the wound into the body and the varying virulence of the cultures (Keen.)

Streptococci have an affinity for the lymph vessels and spaces through which they travel very rapidly, provided there is any squeezing or massage of the part. Streptococci are not obstructed in process by fixed tissue cell, barriers or leukocytes as are the staphylococci, their leukotactic powers being feeble. The production of liquefaction of tissue and production of pus is also small, though their presence is accompanied by the most violent inflammatory processes.

The pus produced by streptococci is usually scant, watery; if an abundance of yellow creamy pus is found, you may be sure of a mixed infection with staphylococci, as is well illustrated in phlegmonous erysipelas. Inflammations in which streptococci exist have a tendency to spread widely, the streptococci preparing the way, as it were, for the staphylococci, after which the streptococci may practically disappear, as is the case in many abscess cavities. Purely staphylococci suppurations are generally more limited, being circumscribed by a hemmed in wall of leukocytes.

Symptoms:—Although the general symptoms in streptococci infections are more violent and marked, there is nothing absolutely to diagnose them from those arising from the staphylococcus and from other bacterial infections, except in degree. The marked up and down temperature is not pathognomonic, as has been stated by some authors. The temperature, however, is usually higher and more irregular, with rapid pulse, hard breathing, coated, dry tongue and delirium in the severer cases of streptococci infections.

Treatment: All the prophylactic measures, such as cleansing

of the wounds, hands and instruments that are recommended in aseptic surgery should be carried out in its minutest detail. Sterilized water, and salt and boracic acid solutions, usually serve as good purpose for irrigation, as do the stronger germicidal agents, which, in many instances, if used strong, destroy the tissue, coagulating the albumen, as well as any destructive action they may possess on the germs present.

The skin surrounding the infected wound should be shaved, if it is covered with hair, should be wiped off with alcohol or spirits of turpentine, and thoroughly scrubbed, if not too tender, with soap and water. This should be followed by rinsing off with 1/2000 bichloride solution. If the wound is superficial, peroxide of hydrogen poured over, as it oxidizes pus and necrotic tissue; after the peroxide, flush with sterilized saline solution.

If it is a hand or foot that is covered with machinery or train grease, dirt or grime, it is utterly impossible to make it perfectly clean at the first dressing without an anesthetic. The horny hand of the laboring man is best softened by what might be called the surgical aseptic poultice, or an abundance of sterilized gauze kept wet with either $\frac{1}{2}$ of 1 percent of carbolic acid solution, or 1 to 5000 of bichloride solution.

Don't send the patient away until you have furnished him with these antiseptic solutions with which to keep the wound moist for the first 24 or 48 hours, as, by this time, you will find much of the horny layer so softened that the cleansing and the rendering of the hand aseptic is much more easy to accomplish. We can either keep up this moist dressing, or after this we can adopt either the ordinary antiseptic dusting powders, or some of the antiseptic ointments with 10 per cent ichthyol, provided there is much burning inflammation and pain connected with the wound. Tincture iodine is an excellent germicidal application in such cases.

Local applications of 30 grains chloride of zinc to the ounce of water, or pure carbolic acid immediately followed by the application of alcohol, may be required for some cases in which the infection has been of a most malignant type. All retention sutures, manipulation of the part, and cutting away of any except absolute necrotic tissue should not be recommended, from the fact that it opens up that many more sources of infection.

After cellulitis has begun, the use of large, hot, moist applications will assist in producing resolution or in relieving the severity of the disease by keeping the capillary circulation open.

If the phlegmonous process of inflammation or cellulitis continues threatening gangrene, or sloughing of the part, numerous and free longitudinal incisions are to be made. Under such conditions it is best to use local anesthesia if the infection has weakened the patient too far for it to be safe to give a general anesthetic, which may lessen his resistance to sepsis. Moist dressings in the form of hot applications are preferable to dry powders, because the moist dressing prohibits the drying of the discharges and interference with absorption. When extremities have been incised in a more virulent form of infection, if they can be placed in a continuous hot baths, as the ordinary foot tub, for either arm or leg, without any dressing whatever, the capillary circulation is much improved as well as the relief obtained by the hot application, continuous drainage is better obtained in the bath than by bandaging.

Prophylaxis: Remembering that we have such an infinitesimal micro-organism common to all the dirt and grime with which the hands and tools of the average laborer is infected, it becomes our province, upon the least abrasion of any parts, to so thoroughly cleanse the wound with antiseptic solutions, that any germs being left alive is practically impossible. When the field is once made aseptic, then keep it so by less frequent dressings and more constant applications of the standard antiseptic solutions.

Very often these wounds are inflamed, and septic before they come under the care of the physician. The lymphatic vessels and veins are involved and some cases have even gone on to purulent discharges and destruction of tissue. In the management of these cases even though already infected we should use the same aseptic precaution about our hands and instruments as we would in a fresh surgical operation, lest we add another burden of responsibility by making a mixed infection of a case that is already bad enough. To prevent carrying the infection to another patient it is better to dress such cases with hands protected by rubber gloves.

The majority of germs, even in an abscess cavity, are dead, but the products of their decomposition carries on the inflammation

just as though they were living entities. This gives a cue to the treatment of all such infections. Thorough drainage should be the slogan in every infected wound. I have been led to believe that excessive irrigation and injections of peroxide of hydrogen into sinuses and infected cavities is not a good plan of procedure, as by this very method we may drive these germs on into non-infected areas.

As a matter of course the ordinary cleansing of the part with some germicidal irrigation would seem the proper thing to do, yet all of us understand that there are always germs left after the most thorough bichloride irrigation. The hot carbolic drip for 24 or 48 hours is one of the best methods of subduing these infections, because it penetrates into every portion of the diseased tissues. I have recently saved a foot (or compound fracture) by this drip. Any antiseptic solution strong enough to destroy all the germs would also destroy the tissue which contain the germ. They are neither desirable or necessary, and should be used only in moderate strength and in first aids. Rest of the extremity is absolutely important, it should be obtained in the leg by putting the patient to bed with the extremity elevated, and in the hand and arm by applying a splint and swing and allowing no manipulation of the part which only lights up and spreads the germs to non-infected areas.

The Bier method of applying a light bandage around infected extremities just tight enough to cause a slight blueness for an hour or so through the day, has been an invaluable benefit in many of my cases.

The general treatment consists in the meeting of symptoms as they arise, such as sponging and ice applications for excessive temperature, strychnia and digitalis for weak, fast hearts, the keeping of the kidneys and bowels flushed out well by any suitable remedies and an abundance of water. The Murphy drip per anum, in order to have the patient take up more fluids, thus diluting the ptomains, all valuable adjuncts in bringing these severe infections to a successful termination.

With acne infections, Wright's bacterial staphylococci vaccination has proven a great success in some cases, and its further field

of usefulness is one of the future helps to be looked forward to in the treatment of all these bacterial infections.

Most cases of acne, boils and common pus infection of wounds are due to staphylococcus. Any of these, when chronic, may be treated with bacterial vaccine, according to Prof. Wright's opsonic theory. Though the opsonic index is desirable, and no doubt often a vaccine made from the germ in the particular case would give better results, it is perfectly practical to give a patient a mixed staphylococcus vaccine, which can now be obtained from the pharmaceutical houses or from any good bacteriological laboratory.

The ordinary dose of staphylococcus vaccine is 200 to 1000 million of dead germs, and the interval between doses one week to ten days. The technic of giving the vaccine does not differ from that of giving any other hypodermic injection.

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P. L. Thibaut, M. D., Chairman.

Some Recent Experiences in the Surgery of the Kidney with Special Reference to the use of the Gauze Sling in Fixation of the Kidney.

By DR. J. A. DANNA, New Orleans, La.

It was my intention when the title appearing on the program was handed in, to report my experiences with 15 cases of kidney surgery that I have had occasion to observe recently, with such remarks and observations as each case might have brought forth. However, when I got down to the work of writing down in the form of a paper, all that I would have liked to have said I saw that it was impossible to crowd into a paper to be read within 20 minutes, all the material at hand.

I will confine myself therefore, to a subject that has interested me very much during the last seven months, and which I have used in seven cases. While in Philadelphia last October, it was my

good fortune to see Dr. Jno. Chalmers Da Costa, Professor of Surgery in the Jefferson Medical College, do an operation for movable kidney, and was struck by its simplicity, the ease with which it could be done, and the thorough and lasting manner in which the kidney was fixed to the lumbar muscles.

After exposing the kidney fat through a lumbar incision the kidney was dissected loose from the fat, and after cutting away part of the fat in front and behind it, was brought out through the wound. The capsule was now incised at the convex border and peeled off to the hilum, and a few sutures put through it, puckering it to prevent its slipping back over the kidney. A strip of iodoform gauze was now passed as a sling around its lower pole and the kidney returned within the abdomen and pushed up under the diaphragm, being effectually held against the abdominal wall by means of the sling. The wound was now packed with more gauze, going down to the lower pole of the kidney at the bottom of its upper angle, and a dressing applied. This sling of iodoform gauze consisted of two strips sewed together at their ends with 10 day cat gut so applied that the sutures would be over the hilum or that part of the kidney furthest away from the exterior. Thus after due time had elapsed for the absorption of these cat-gut sutures and the ends were pulled on, they came away readily, leaving the kidney in a sling of granulation tissue which came in contact with a similar layer of granulation on the kidney surface, the two cementing together to permanently fix the kidney. The whole procedure required little longer than it takes to tell it, and looked so easy that I resolved to try it at the first opportunity.

The first occasion I found to use this method was after removing four stones from the pelvis and calices of the kidney of say, Case 1. The stones were removed through an incision in the kidney substance at a point where it had been much thinned by distension. This incision was closed with cat-gut sutures. Feeling that the kidney must now be fixed so as to be in easy reach in case of the development of a urinary fistula, I decided to use this method of fixation. Stripping of the capsule I refrained from, owing to the fact that the kidney substance was very thin in some places, and my sutures would hardly hold without the additional

strength of the capsule. I also felt that the use of a second sling around the upper pole would permit of still better controlling the movement of the kidney and keeping it against the abdominal wall. I therefore used two slings, one around each pole and pushed it up under the diaphragm by digital manipulation and relaxation of the upper sling, and pulling on the lower, thus bringing the lower pole of the kidney up against the abdominal wall in the upper angle of the wound and as nearly as possible to its normal physiological position. Though the slings themselves acted as drains, I inserted a rubber tube cigarette drain down to the incision in the kidney substance and sutured all the wound except sufficient of the upper end to permit of the passage of my slings and drain. I tied the lower to the upper sling over a roller of gauze which was placed across the wound, thus effectually tying the kidney as it were, up against the abdominal wall, much as a ship is moored to a wharf. After six days the drain was removed. After twelve days the slings were removed with little pain or difficulty in extraction. Fearful of possibly pulling the kidney down out of its new position, I made certain to steady well the lower sling while I pulled out the upper first one half and then the other, pulling the two halves of the lower slings out last. Patient never had a drop of urinary leakage and is now perfectly well.

Case 6 was identical with this one, except that he had but one stone, and with the same procedure and good result.

Case 2 was a nephropexy for movable kidney. In this case I followed the steps of the operation as I had seen it performed with the modification that I did not cut away any of the fat, and used two slings. It seems to me that it does not look exactly right that we should be removing kidney fat from a patient whose very condition of movable kidney is said by the most competent authorities to be caused by a lack of support, owing to the absence of an adequate amount of healthy fat surrounding it. Again, while I believe in fixing the kidney to the abdominal wall, I think we should endeavor to surround it on its free aspects with a type of tissue that would not be so apt to give us later a dense, tough, unyielding cicatricial fibrous capsule that might later in life so squeeze the kidney, as it were, as to impair greatly its function.

For this reason perirenal fat is much more desirable than retroperitoneal cellular tissue.

As to the use of two slings instead of one, it seems to me that not only will two slings better hold the kidney in position than one, but they would also double the amount of surface for the formation of active granulations to act as two shells in which each pole of the kidney respectively lies.

Cases 3 and 5 were identical with Case 2, and all resulted well.

Case 4 is probably the most interesting of all, as it gave me an opportunity two months after having done the operation of testing the strength of the adhesions fixing the kidney in position.

This was a case of stab wound of the kidney where, after suturing the wound in the kidney I replaced it with two slings and without stripping the capsule. Two months later it became necessary to remove the same kidney, owing to the formation of a small traumatic aneurysm which had ruptured in the pelvis and gave rise to the most alarming hemorrhage. So firm were the adhesions that had formed between the kidney capsule and the surrounding structure that I was obliged to peel the kidney from its capsule in order to get it out. In other words, the adhesion of the capsule to the surrounding parts was firmer than its adhesion to the kidney itself.

To my mind no better proof of the efficiency of the operation could be submitted, and if I was a believer in it before, I now became an enthusiast.

Case No. 7 is the last case in which I have used this method, and it here comes forth prominently as a measure accomplishing an object difficult, if not impossible of accomplishment by any other means known to me. In this case as in Cases 1 and 6 (where a stone or stones were found), a nephrotomy and pyelotomy was done to explore the kidney for a suspected stone, which was not found. The condition was one in which the kink in the ureter had given all the symptoms of stone.

We, therefore, had to deal with a kidney that must be fixed, a ureter to be stretched and an incision in the pelvis and the kidney substance, which required the insertion of a drain. No method of suture could so easily and so effectually accomplish all these

objects. Yet this fixation has cured a patient of kidney colic, who had been suffering for three years.

Those of us who have done or seen the usual operation of suturing the kidney to the muscles of the back will agree with me that for simplicity, rapidity, ease of performance, absence from any danger, thoroughness and permanence of fixation of the kidney, it has the nephrorrhaphy beat to a standstill. Moreover, this is the only operation that will reduce the kidney to its normal physiological position and not leave it exposed between the fibers of the lumbar muscles, subject to the slightest traumatism in this region. Furthermore, no appliance or special abdominal pad is required to keep the kidney from getting loose immediately after the operation, and we are not in constant fear that the few sutures that hold the kidney might cut through and make our operation a failure. This operation is practically the operation introduced by Senn years ago, and I claim only the privilege of reporting my experience and expressing my humble opinion. For that reason I say nothing of its use in Edebohl's operation.

DISCUSSION.

DR. E. D. MARTIN. The important point about the operation is that it allows the kidney to become more adherent. Other operations are just as successful, if they are done just as carefully in the beginning. There is another method which is used some, which is good, especially when the same incision is used. I have done it only once myself. The peritoneum is brought up under the kidney, and a pouch is formed, which make it doubly secure.

I want to say a word about the cases operated on. There is often a tendency to go too far. I think a good rule to adhere to is not to trouble a kidney that does not trouble the patient. I know of a case where the kidney has been in the pelvis for ten years to my knowledge, and has given no trouble to the patient. These floating kidneys are not apt to give trouble. In some of the obscure cases, it might be well to look in this direction.

The Present Status of the Question of Uterine Carcinoma with Especial Reference to its Early Diagnosis and Radical Treatment.

By S. M. D. CLARK, M. D., New Orleans.

No disease has had a more persistent warfare waged against it by the medical profession than cancer. Clinical experience has taught us that cancer of the womb is the most frequent and dreaded location for the development of this malignant neoplasm. Uterine cancer is so broad a question that it will be possible to discuss, in a paper of this character, only special phases of this important subject.

The points upon which I wish to especially dwell, are the symptomatology of cancer in its incipient stage; the importance of making an early diagnosis; the best methods to pursue in order to recognize this disease in its incipency; and, lastly, to briefly discuss its surgical treatment.

When one realizes that the course followed by cancer is one essentially of rapid growth, the average patient living not over three years, and the majority dying within two and a half years, it is not difficult for one to see how important it is for medical men to recognize this disease in its incipency.

It is to be much regretted that in all of the work that has been done on cancer, we have not as yet been able to place our finger upon any one special sign or symptom which can be looked upon in the light of being pathognomonic in character.

Clinically, it is an authentically established fact that from sixty-five to ninety per cent of the cases that report to our hospitals for treatment are in an inoperable stage.

Thienhause says: "We ask ourselves why is it that in cases of cancer of the uterus, women consult a physician usually at a period when radical cure by surgical means is out of the question. We must attribute this to two causes, first, to gross ignorance on the part of the public in regard to cancer in general, and especially its early symptoms; and second, to the insidious character of the disease."

Whereas, the above statement is true in many respects, it is my

belief that this deplorable state of affairs is not to be placed at the feet of the laity, but is to be attributed chiefly to the ignorance and more especially to neglect and the existence of a procrastinating tendency on the part of the medical profession in the management of these unfortunate people.

When it is remembered that the uterus occupies a position hidden from view, the average woman, being ignorant of its location, and when we recall that this disease is especially insidious in character, not expressing itself in the form of pain, it is readily appreciated what a difficult problem presents itself for solution, when viewed in the light of recognizing this disease in its earliest stages. This knotty problem can be approached in but two ways: First, the general profession must be aroused to the point where they are always on the alert, for the detection of this disease; and, secondly, the public has to be educated to know the signals of danger and forewarnings of this, their most dreaded enemy. We then, as physicians, must first correct our own shortcomings, and then the public can be reached by executing the proper educational campaign.

So then let us consider to-day, and remind ourselves of some of the most suggestive symptoms of early cancer of the uterus, none of which can be looked upon, as said before, as pathognomonic, but still are sufficiently suggestive to warrant us in making a careful examination. One of the first signs which should always call for investigation is any menstrual disorder, whether it be in the light of excessive menstruation or irregular menstruation. Secondly, any evidence of bleeding or slight show of blood after coitus or exertion of any kind, should immediately call for investigation. Thirdly, an increase in the character and quantity in the discharge in a woman who has had simple leucorrhea for several months. Of the discharges with which we meet, the watery, acrid, slightly tinged at times with blood, is a most significant symptom. All unaccountable uterine bleedings or discharges should be, in every instance, carefully looked after, with especial reference to eliminating the possibility of cancer.

In looking over the history of carcinoma of the cervix, in my cases, I find that one of the chief points and earliest manifestations

of this disease has expressed itself first in the slight bleeding after intercourse or walking. The excessive menstruation and irregular menstruation in a majority of my cases, showed a decided disturbance. This question of watery acid discharge is one to which I again wish to call your especial attention; it should never be passed over lightly.

By men who have been keeping accurate histories of their cases of operable cancer and inoperable cancer, it has been found that in from sixty to eighty-five per cent of these cases there has been some bleeding or danger signal in existence for over six months, which has been neglected on the part of the patient, or ignored or treated lightly by the attending physician. I have been much interested in determining how much valuable time is lost in those cases that report for examination, between the first symptoms of bleeding or other suggestive time, and the time that she appears for treatment. In my cases it has averaged eight months. And if we realize that this disease does not remain local in the cervix longer than from a few weeks to three months, then one can appreciate what precious moments of a patient's life are being thrown away by ignorance on the part of the patient and the spirit of procrastination on the part of the physician. So, then, we see what a magnificent field is presented for educational work, both on the part of the physician and the layman. The efforts of the gynecologist, from a surgical standpoint, have reached the limit, they having, through a prolonged operative experience, finally developed a procedure by which a maximum amount of tissue, in keeping with human endurance, can be removed from the pelvis. Therefore, the hope for improvement in our results in cancer of the cervix rests mainly with the general practitioner, for it is he who comes first in contact with these cases.

There is no denying the fact that we, as medical men, have not been doing our full duty towards these unfortunate women. We have to cast the mote out of our own eyes before reproaching the layman.

There are certain fallacies into which the profession has fallen. On the part of many general practitioners, there is a decided tendency to explain every imaginable ill to which a woman is heir

around the age from forty to fifty, as originating from the menopause. This great bugaboo, the menopause, is a dumping ground for almost every ailment in women from the fourth to the fifth decade. Uterine hemorrhage, appearing after the menopause has ceased, is a signal that should never be trivially considered, for in the vast majority of cases, an examination will reveal a beginning malignancy. Until the general profession discontinue regarding the menopause as an explanation for so many ills, our efforts against this disease will always be seriously handicapped. As long as physicians shall have patients coming to them suffering from discharges from the vagina and menstrual derangements, and they look them in the face and tell them to take a douche, and gives them some ergot, women are forever to be doomed to the horrible fate of cancer. All these symptoms should be regarded as suggestive, and there is but one way by which the possibility of the existence of this disease can be eliminated, and that is by insisting upon a thorough examination. There seems to be a rooted objection on the part of some of the general practitioners to making vaginal examinations. Some men claim that they find that they are refused permission to make examinations, but I regard this question of examining women as one founded largely on the attitude taken by the physician and one that can be easily overcome by acquainting the patient with the danger that she is encountering by refusing such permission.

I have never yet seen the woman who would not finally submit to vaginal examination when she was properly approached and a suitable explanation given her showing the necessity of resorting to such steps. In short, no medical man should consider treating a case having suggestive symptoms of cancer, unless a vaginal examination be permitted.

Another great fallacy on the part of the profession is to treat many of these beginning ulcerations of the cervix as benign simple ulcers. It is so common, in taking the history of these cases at my clinic, to find that they have been in the hands of physicians, varying from four months to a year, who had been treating them locally for ulcers of the womb. Nothing could be so far erroneous as this attitude taken by the majority of physicians, for, clin-

ically, it is a known fact that not more than three per cent of these cervical ulcerations are benign in character, the preponderating majority being malicious. We must regard, then, such ulcerations as malignant until we have proven them to be benign. I have never seen a true simple ulcer of the cervix, and Prof. Lewis tells me that he has seen but few.

When a case presents itself that is so closely on the border line, it being impossible to recognize clinically whether malignity be present or not, the microscope is to be the final judge of the true condition. But it must not be forgotten that the clinical symptoms are of greater importance than the verdict of the microscope, the latter being regarded more in the light of an adjunct and link in the chain of evidence, rather than a positive factor.

It is to be kept in mind that cancer of the uterus is chiefly a disease of mid-life, occurring specially between the third and fifth decades. It is found far more frequently in women that have had children. It is not to be forgotten that while cancer is local, no discomfort or constitutional symptoms are manifest. When pain, offensive discharges, cachexia, anemia and loss of weight are encountered, it means that the disease has already progressed beyond the limits of the uterus and, in most of these cases, they have already passed the operable stage.

Another erroneous belief, strongly prevalent among the public, is that hemorrhage of the uterus without pain cannot be cancerous in origin, whereas we know that in the absence of any inflammatory process, the malignant disease has already infiltrated the surrounding tissue.

Once we can overcome the lethargy on the part of the profession relative to this question, we can then take up our campaign of education among the masses, which has been so effectually carried out in Germany.

The pioneer in this educational campaign among the physicians and laity, is Winter, of Königsburg, who, in 1891, published a paper on the early diagnosis of cancer. Numberless articles have appeared from his pen since that time, treating the question of cancer in all of its aspects. In December, 1902, he mailed to every doctor in East Prussia, a monograph, urging them to make inter-

nal examinations of all suspicious cases: he further formulated the symptoms of uterine cancer and sent them to every midwife, pleading with her to send to the doctor all patients which presented these enumerated symptoms. He also had published in the most prominent newspapers in Prussia, "A Word of Advice to Woman-kind," in which the importance of regular menstruation was plainly discussed. In one year, as a result of his splendid work, he found that in 1903, the percentage of cases that were suitable for operation had risen to seventy-four per cent, as against sixty-two per cent in 1902. Efforts of similar character have been made in Germany by Duehrssen. The Austrian Cancer Commission distributed to every practitioner in Austria a pamphlet on the early symptoms of cancer. This plan of education is just beginning to be employed in England and France. Much activity has recently been shown in Switzerland in furthering this crusade against cancer. Sweden, Belgium and Italy have taken similar steps. Last year, at the American Medical Association meeting, the Committee on Cancer of the Uterus submitted a masterly report, and it was urged by the chairman of this committee that a copy of this report be sent to every member of the county societies in America. Last year, at the A. M. A. meeting in Boston, a splendid symposium was prepared on cancer of the uterus, and this year the chairman of the Section on Obstetrics and Gynecology has selected the question of cancer as the subject for discussion.

We see, then, that taking the stimulus from European countries, this crusade against cancer has found fertile soil in our own country, and that there is a universal wave throughout the civilized world reviving this whole subject matter, and pleading for a renewed activity and aggressiveness in the death struggle against this dreadful enemy of womankind.

I wish it was so that some of the members of this society could come with me to my clinic at the Charity Hospital and see the great number of women that present themselves there for treatment, over eighty-five per cent of which have passed the operable stage. And, further, if he could see the daily occurrence of these unfortunate creatures departing from the clinic with bowed heads and sorrowful hearts, knowing that they are returning home to die,

not one man in this society could doubt the necessity and wisdom of bringing this question before this body and pleading for its most thoughtful consideration.

As was aptly put by the Committee on Cancer of the American Medical Association: "The time of operation (measured by the progress of the disease) is of much more importance than the type of operation, for a simple operation, if performed very early, may effect a cure, while a most radical at a later stage is of no avail."

There is one great maxim to be kept prominently in mind when considering the question of cervical cancer, and that is that, at some time, this process is a local one. Keeping this important fact always in mind, the whole subject reduces itself to the one point of our profession doing its full duty in properly investigating all suggestive symptoms and the people on the other hand being educated on the importance of properly appreciating certain symptoms, all of which is for the purpose of discovering the presence of this disease prior to its extension into surrounding pelvic structures.

It is encouraging to see a decided improvement in the disappearance of the professional lethargy formerly exhibited on this question of cancer; but there is still ample reasons to plead for a more pronounced awakening of the general practitioner on this subject, for it is to him that we must look to as being the most important factor in this long battle.

From an operative standpoint, cancer of the uterus has been a nightmare to the gynecologist. It has been a long struggle, replete with false hopes and disappointments.

Pathology has taught us that every cancer in the beginning is a local disease, and if the entire area that is involved can be removed, it can be cured. The gynecologist has waged a ceaseless warfare against this disease, devising in every conceivable way to perfect an operation in which the greatest amount of tissue could be safely removed from the pelvis. It is only in recent years that we are beginning to feel some encouragement from the surgical results obtained in cancer of the cervix.

The German gynecologists have been the most persistent and tireless workers in this field. Freund, Wertheim, Mackenrodt,

Czerny, Kundrat, Von Rosthorn, and a host of others, have been most conspicuous in this sorely tried surgical work. The American gynecologists have been a close second to the Germans in advancing the surgical technic of uterine cancer. Ries, Werder, Clark, Kelly, Cullen, Sampson, have taken the most conspicuous part in the development of this work in America.

Time forbids our going into the technical details of this major piece of surgery. It has been developed to the highest point and is an operation which should be attempted by no beginner.

Suffice it to say that the main features of the operation is in first thoroughly exposing the ureters, and, secondly, removing the parametrial tissue, which pathology has shown to be one of the chief sources for early infiltration, as evidenced in the vast majority of recurrences showing itself in the vaginal scar; thirdly, the dissection of the lymphatic.

There are yet several points that are to be determined in the near future, but which are now being worked out by our ablest gynecologists. The operation has been reduced to an anatomical dissection, the entire purpose of the operation being to get as wide of the diseased area as is keeping with the endurance of the patient. Prof. Wertheim, of Vienna, recently visited America and presented the result of his ten years' work in cancer of the cervix. The primary mortality in the last hundred cases was only eight per cent. Of the last hundred cases operated upon, sixty per cent are living five years after the operation. Mackenrodt has forty-two per cent of cures; Von Rosthorn about thirty-five per cent; and Ries reports that out of eight cases operated upon five years previously, six are living and in good health.

One cannot deny that, with these results as a beacon of light upon this formerly hopeless field of a few years ago, that we have a right to feel decidedly encouraged. We in America are possessed of abdominal surgeons of the highest skill, who can with equal dexterity execute with any of the surgeons, and it is my firm conviction that if we can obtain the thorough co-operation of the general practitioner, who will in turn unite in an effort to educate the people on this vital question, that it is not expecting too much when we believe that the question of uterine carcinoma

can be placed upon the same surgical basis as have American surgeons placed cancer of the breast.

DISCUSSION.

DR. CHAVIGNY: There has been a vast amount of work done in cancer in the last twenty years, and we find ourselves no further advanced than then. Men have devoted their lives to a study of the etiology of this disease, with but very little progress. I can substantiate what the doctor says about the patients coming into the hospital with carcinoma of the cervix. They come there too late, and there is nothing to do for them, and they are told to go home, and all they can do is to go home and die. Now this matter of early diagnosis is an extremely important matter. The doctor has called attention to ulcers of the cervix. There is another type where you see no signs of the disease on the cervix; it is on the inside and on the canal. It is this class of cases that cause an error and failure in diagnosis on the part of the general practitioner so often. The symptoms are hemorrhage, pus and pain, and foul discharge. These are the three principal. Hemorrhage is the most important symptom. We have this in the very incipency of the disease. I have seen cases where they had the whole of the cervix nearly eaten out, and complained of no pain. I think it is proper that the physician should examine the outer cervix and the inside also, because inside you often find cases of a different type. The general practitioner, in these cases, is not in a position to properly examine the patient, and whenever there is a doubt, I think we ought to call in a more experienced man. When we look over the literature of cancer and realize that over a fourth of the cases of cancer in women are in the uterus, we will appreciate the necessity of early diagnosis of this condition. I hope this paper has impressed upon the members that cancer is purely local in its incipency.

The amount of research done in the study of cancer has been vast; indeed, no other field has had more study, and we find ourselves to-day very little, if any further, advanced.

I can substantiate the doctor's remarks in reference to the patients who seek admittance in the Charity Hospital. The great

majority of them are inoperable and are sent home without anything but palliative treatment, to wait the sure progress of the disease, when death comes as a relief. Therefore the early diagnosis of uterine carcinoma is to my mind the most important point to be brought out, and I believe it should be on these lines that we should look for a lower mortality in these cases. All ulcers of the cervix should be treated as a condition of the utmost importance and kept under constant supervision. If they do not yield to treatment in from two to six weeks, we should then become suspicious and have specimen examined for malignancy. There is another type of uterine carcinoma, but is confined to the canal, which gives no ocular sign until the disease has progressed beyond the surgeon's possibilities. We must rely for an early diagnosis on the following symptoms: hemorrhage, pain and an offensive discharge. Of these hemorrhage is the earliest, occurring in the very incipency of the disease. I have seen cases where the cervix was entirely diseased without the presence of pain.

The examination for carcinoma uteri should not be confined to the exterior of the cervix, a careful inspection should be made of the cervical canal, where very often the disease has its beginning.

The general practitioner in these cases is not in a position to properly examine the patient, and whenever there is doubt, we ought to call in a more experienced man.

When we glance over the statistics of cancer we find twice as many women suffering from the disease as men, and one-fourth of the cancers in women are of the uterus, we will appreciate the necessity of early diagnosis of this condition.

Dr. Clark's paper should impress us with that all important fact, that cancer in its incipency is a purely local disease, and if attacked early is amenable to surgical treatment.

DR. F. J. MAYER: I think the second point made by Dr. Clark ought to be accentuated by the society, the necessity of public instruction in the danger signals of uterine cancer. It is a strange phase of the body social that it blushes in mock modesty at a public discussion of sexual hygiene so essential to human health and happiness, while reveling its salacious fancies in all

the disgusting details of the Thaw case and other tenderloin idyls of the pampered, idle and vulgar scions of unearned wealth.

DR. MILLER: This is a subject of deepest concern, both to the practitioner and the public, and it is only through such papers as Dr. Clark here presents, that the great educational work in and out of the profession can be carried on. It is not a new subject. The same dangers have been fought against for years, and the same consequences have followed the neglect of the principles mentioned in the paper. But there is new testimony to be introduced, more encouragement is to be offered these sufferers if we can reach them in the early stage of the disease.

We have reached the limit in operative measures, we have shown that such extreme surgery is justifiable, and it has been necessary to educate the people and the family physician to the necessity of co-operating with the surgeon. Formerly about 10% of the women came early enough to allow of radical operation. An astonishing example of the results of popular education is that of Winter, who has systematically gotten at the public through lectures and articles given the lay press. As a result 70% are now entering German clinics in time for radical treatment. In Switzerland pamphlets are distributed to all midwives and nurses, detailing the early symptoms and the dangers of delay in consulting their physician.

A word as to the operative indications. I believe that most surgeons to-day concede that the abdominal route is the best method, with a few exceptions. I have made a careful study of the technic on the cadaver in some twenty instances during the past three years, besides a fair number in clinical work, and I am convinced that the radical hysterectomy, as done by Wertheim and many others, offers the best promise of permanent results. Schuchardt's paravaginal technic certainly does not offer the field for work that the upper route displays.

In closing I wish to urge careful treatment of cases that seem advanced, before an operation is performed. If patients with seemingly infiltrated broad ligaments and fixed uteri are put to bed, douched regularly, and the cervix cleaned up, even to the extent of cauterizing the diseased area, there is often a new pic-

ture presented. Infection often creeps into a sloughing cervix and the condition of the surrounding structures is quite often the result of inflammatory processes rather than from carcinoma.

DR. CARRUTH: We cannot too strongly accentuate the importance of thoroughly examining every female patient who comes to us with any suspicion of malignant disease. I believe it is not the general rule through the country to do so, and I have been struck with the appalling number of cases I have seen in the past few years in the country, as a general practitioner, that are too late for operation. It is indeed seldom I find a case in a stage where we can offer hope to the patient. We cannot insist too strongly that every such case should be examined. I have had no case that did not readily submit to examination.

DR. MICHINARD: There is one thing that I want to impress upon you, and that is the insidiousness of cancer of the cervix. So insidious is it that I have come to this conclusion, that after a woman has reached the age of 40, whether she feels well or not, she should submit to a vaginal examination two or three times a year. I have had several cases that had treated themselves for leucorrhœa, who were suffering from cancer. These people neglect themselves through ignorance. If they only knew the danger awaiting them when they get to the age of 45, they would apply early for treatment. We must educate them; that is our duty. There is not a single operation that has ever cured a case of advanced cancer of the cervix. It will return in six or seven, or eight years at the latest. The only chance for cure is to treat it when it is at the very incipency. You cannot do that until the people are taught of the dangers of cancer. So important do I consider this that I believe it would be right for this society to take some action.

I make this a motion, that the society, through its President, appoint a committee to arrange some method through which the people and physicians will be educated. That committee can report at the next meeting of the society.

This is not novel. It has been done in Europe. There they educate the people and save many lives by it. They are getting hold of the cases early, when they can operate. Dr. Wertheim

resides where there is a great deal of cancer. Whenever the women there have a pain they apply to him or to some other good doctor for examination. It is for that reason that he could operate on about 600 cases in a few years.

DR. NEWTON: I would like to have Dr. Clark go a little more into the details of the diagnosis of incipient cancer of the cervix. I realize that it is important, and hope he will throw a little more light upon that point.

DR. DEMPSEY: Dr. Michinard has struck the keynote, which is education, and recording of this disease, we find as a result of the campaign made on tuberculosis the enlightenment has grown wonderfully, I believe the results in reporting all cases of cancer will be as great. In making this campaign, consideration ought to be given to the women practicing midwifery. Many of the cases are handled by them before they reach the physician. I believe they are handling more cases in a year than the regular physician. I say, therefore, that education is needed.

DR. CLARK (in closing): I prepared my paper with special reference to trying to enlist the aid of the profession in getting these cases in the incipency. The gynecologists have developed the surgical technic in uterine cancer to a high point. It is an operation that should not be attempted by a beginner. Dr. Cullen says the operation should be done in the morning when the surgeon is fresh. I did not write the paper to bring out the surgical phases of the subject. It was written for the purpose of getting the general practitioner aroused to a point where he will be on the alert, and stop looking upon the menopause as an explanation for so many pelvic troubles. When a woman comes to you and says her menses have stopped a year ago, or two years ago, but that she is again having hemorrhages, how foolish it is to send her away by telling her it is only a flicker of the candle and a trifle. It is impossible to tell what is the matter with a woman's pelvis by looking her in the face; you must examine her. I have never seen a simple ulcer, and Prof. Lewis says he has seen but few. To treat cases as ulcers, when the condition is so rare, is a dangerous procedure.

28 In regard to education, I am heartily in favor of the proposi-

tion of Dr. Michinard. There is not a civilized nation in the universe that has not taken up this work. I believe we could reach every physician in our State. The American surgeon can do as good work as Wertheim. If he can get results in sixty per cent of cases, we have grounds for encouragement.

The Treatment of Abortion.

By R. W. O'DONNELL, M. D., Monroe, La.

By the term abortion, we mean all cases of pregnancy terminating before the 28th week. For convenience, we divide the treatment into prophylactic, threatened and inevitable abortion.

Prophylactic: Patients giving a history of repeated abortions, or premature labor, should be carefully examined in order to ascertain the cause, as in not a few cases we are able to correct the cause. The most common causes are syphilis in one or both parents, endometritis and retroflexual uterus. For the first, of course, we have mercury; for the endometritis, curettage, for the retroflexion, the use of the pessary is of great value, though it must not be forgotten that it must not be allowed to remain too long, but should be removed occasionally, as it will often irritate the vagina. It can be discontinued after the third or fourth month with perfect safety.

Sometimes, in newly married women, one abortion quickly follows another, caused probably by conception taking place too soon after the first abortion, that is, before the endometrium has returned to its normal condition. In a case of this kind, advise your patient to abstain from sexual intercourse for about two months.

The neurotic patient sometimes causes us a great deal of trouble. She will show evidence of threatened abortion (though you can find no cause for the trouble) at every menstrual period for the first three or four months. A patient of this type I have on hand at present. Up until two weeks ago I have had to give this patient a hypodermic of morphin, put her to bed and keep her there for about a week each month. I prescribed *viburnum prunifolium* in

3i doses every four hours, to be taken three days before and three days after the beginning of the menstrual period; but like all neurotic patients, she would not carry out instructions when she was feeling well.

Threatened Abortion: This is a condition we meet with very often, and one which can usually be successfully treated. The first symptoms are pain in the back, intermittent pain in abdomen, sometimes simulating intestinal colic, slight dilation of the cervix, with or without hemorrhage. The patient should be put to bed at once and a hypodermic injection of morphin, gr. $\frac{1}{4}$ or $\frac{3}{8}$, given. Very often the symptoms will subside in a few minutes, but that is no sign that the patient is well enough to get up. She should remain in bed for about one week.

If the hemorrhage persists, but is not excessive, that is, if the hemorrhage is not more than the normal menstruation, we are justified in waiting. But if the hemorrhage is excessive we must at once institute measures to empty the uterus.

We occasionally meet cases, however, in which the hemorrhage is excessive, and the cervix well dilated, that will go to term.

I was called one night to see a patient, living six miles in the country, who had had severe hemorrhages during an entire day. I found the cervix dilated to about the size of a silver dollar, and from the condition of the patients clothes and the bed, I knew there must have been excessive hemorrhage.

As it happened, I had no instruments with me and no help within six miles. I gave the patient hypodermics of morphine during the night, and in the morning had her put on a cot and taken to the city, where I intended to empty the uterus, but her condition improved so much that I decided to await developments. I kept her in bed ten days, after which time, as she had no more pains or hemorrhage. I allowed her to get up, and in due time she was delivered of a healthy child.

Inevitable Abortion: This we may divide into *complete* and *incomplete*—complete when the products of conception are discharged entire, and incomplete when the membrane ruptures and the embryo is discharged with the fluid, the products of conception remaining in the uterus.

When we are satisfied that abortion is inevitable, we must direct our efforts to emptying the uterus and controlling the hemorrhage. How should this be done? Two methods are recommended. One is to pack the vagina with gauze, apply a vulva pad and perineal bandage, give ergot one drachm every four hours, and wait. The other is to employ means to empty the uterus at once.

In packing, great care should be taken in order that the vagina should be well filled with the packing material, as a loosely packed vagina will not answer the purpose. The material used to pack is of no consequence, bandages, strips of gauze, absorbent cotton wet with an antiseptic and pressed out answer the purpose admirably. At the expiration of twelve hours the pack should be removed, and in all probability the ovum will be found in the vagina. If the ovum is not expelled, or the cervix not sufficiently dilated, another pack must be introduced, and this one also allowed to remain twelve hours. By this time the cervix will be found to be sufficiently dilated to remove the ovum entire with the finger or curette, if it has not been expelled.

The other method recommended, is to dilate the cervix at once with suitable dilators (after the hands and parts have been well disinfected), and with one or two fingers in the uterus, preferably of the right hand, with the left hand on the abdomen, press down the uterus until the fingers can explore the entire cavity. The placenta then can be easily peeled off from its attachment and removed with a pair of placental forceps. Sometimes there is considerable hemorrhage at this stage of the operation, but it should occasion no alarm, as it will cease as soon as the uterus is emptied.

You will occasionally meet with cases where you are unable to press down the uterus sufficiently to remove the ovum. In these cases it is advisable to administer an anesthetic and introduce the hand into the vagina.

After the uterus has been emptied, it is good practice to swab out the cavity with hydrogen dioxide, and then irrigate with warm normal salt solution. No pack is necessary.

It happens that we are called to see a case where the fetus has been expelled (incomplete abortion), but the placenta is retained and hemorrhage is more or less severe. We must at once dilate the

cervix, if it is not sufficiently dilated, and remove the placenta, either with a blunt curette or with the fingers, in the manner previously mentioned, as the hemorrhage will persist until the uterus has been emptied of its contents and is able to contract firmly.

In cases of incomplete abortion where we are not called in until after the second or third day, where the patient exhibits signs of septicemia, we proceed as above, except that the uterus should be swabbed out with iodine and carbolic acid equal parts after cleansing with hydrogen dioxide.

DISCUSSION.

DR. MICHINARD: I listened to this paper very carefully. I certainly approve of everything he said and suggested, but was greatly disappointed that he did not mention one subject, and a most important one connected with abortions, that is, the differential diagnosis between incomplete abortion and ruptured tubal pregnancy. In ruptured tubal pregnancy there occurs an expulsion of a complete or an incomplete membranous cast of the uterus greatly resembling an ovum sac. This is particularly true during the early weeks of pregnancy. While in the majority of tubal ruptures there exists a severe shock to the woman, this is not always so, as I have known in five cases, three of which, as consultant, I performed abdominal section on. I fear that in our cases of incomplete or supposed incomplete uterine abortion where the embryo is not found we are too hasty with our intra-uterine investigation. In all such cases a gentle, but careful, vaginal examination should be made as to whether there is or is not a mass to the side of or behind the uterus. One can well appreciate the result of a uterine curettage in a case of ruptured tubal pregnancy.

DR. CLARK: This question of abortion is extremely broad. Dr. O'Donnell brought out some excellent points. The value of the vaginal pack is of great importance. I have used it in cases in which they have gone to a point where abortion is unavoidable. When any fever exists I never use the pack. I first pack the interior of the cervix, and packed thus the vagina is as tight as you can get it. When the pack is removed in five or six hours, in

the majority of cases you will find that the uterus has emptied itself and drawn above, and you will find the fetus between the cervix and the end of the pack. The value of this procedure is that you do not have to put your finger in the uterus and thereby run the chance of infection. There is one great maxim about emptying a uterus, and that is to empty it with as little traumatism as possible. I think the finger is one of the most valuable agents we have. I knew one man who used a blunt curette, and thought he had thoroughly curetted, and in five or six hours the woman passed a large placenta. He lost his patient and was severely criticised.

DR. CHAVIGNY: The use of the curette for removal of placental and membranous tissues following abortion I believe is becoming more and more obsolete. I have seen two cases within the past two months where serious consequences followed the use of the curette. One of these cases came very nearly dying from a general peritonitis. I never use a curette and find the suggestion of the use of the finger does not entirely answer in all cases. The placental forceps for large pieces of tissue answers the purpose in a measure, but for those cases where we only have membrane, the use of the regular surgical sponge forceps answers admirably. You can grasp the smallest particles with them without injuring the uterus, thereby diminishing the dangers of infection.

DR. O'DONNELL (in closing): I appreciate very much the criticisms that have been offered and the suggestion of Dr. Michinard with regard to tubal pregnancy. I was always under the impression that the shock following rupture in tubal pregnancy was so marked that it would be easy to make a diagnosis. However, I will keep it in mind.

The Treatment of Uterine Prolapse and Cystocele.

By C. JEFF MILLER, M. D., New Orleans, La.

It has been necessary to practically discard every operation suggested for uterine prolapse prior to the past five or six years. The anatomic principles first worked out proved to be entirely incorrect, and it is only since the later operations for cystocele

were conceived that the essential features of operations for decensus have been understood.

So it may be said that the original contributions of Dudley, Reynolds, Goffe, Watkins and Mackenrodt on the treatment of cystocele were really the first steps in the evolution of the present operative technic of uterine prolapse.

An operation for prolapse of the uterus, to be effectual, must be based upon nature's scheme of suspending every organ from the bony frame work by ligaments, or tissues that serve as ligaments. This is so univocal in nature's scheme that we must keep the principles of it constantly in mind in repairing this most complex type of hernia.

There are two planes of the pelvis, an upper and a lower plane, which normally parallel each other and lie in close apposition. Any operation to be effectual in restoring the uterus and bladder to its original position must replace these two diaphragms, or planes, and retain them at their normal angle.

The chief reason for the failure of the earlier operations for decensus was due to the then prevailing theory that the main support of the pelvic contents was the lower plane, or what is usually termed the pelvic floor. This theory naturally suggested operations to raise the lower plane and restore the keystone of the arch; methods which we now know were entirely faulty because of the lack of appreciation of the existing pathological conditions and the failure to utilize the damaged structures which originally supported the uterus.

The most important of these planes is the anterior, the one composed of the anterior vaginal plate, the sacro-uterine ligaments and the strong fibres of the base of the broad ligaments.

The anterior vaginal plate is a strong sheet of muscular and connective tissue which forms the anterior vaginal wall and at its lower end is attached firmly behind the pelvic bone. At its upper end it is inserted in the middle line into the cervix, and upon either side of the cervix into the abundant connective tissue and muscular fibre of the base of the broad ligaments. These same fibres continue through the sacro-uterine ligaments, thus completing a plane of strong supporting power, stretching from

the secrum to the pubes and closely attached at its lateral margin to the bony frame work.

Nearly parallel to this upper plane and overlapping it is the lower plane, or pelvic floor. It extends from the fourchette to the coccyx, and is composed of the posterior vaginal wall and the perineal muscles and fascia. These two planes support the weight of the pelvic viscera by their compensatory relations just as the inguinal rings strengthen the abdominal outlets by overlapping each other.

The structures composing this upper plane, which lie in front of the advancing fetal head, are subject to almost as much injury as the pelvic floor, although the injuries are not of the same type.

The lower plane is exposed to laceration, while the upper is simply distended and overstretched, and at the conclusion of labor the attachments of the anterior vaginal plate are intact, but the plate itself between the points of attachment is left thinned and weak.

Goffe has aptly expressed a further change by describing the fascia at the base of the bladder as a pulley block. If this pulley block is injured, the anterior vaginal plate loses its power of keeping the uterus forward, the sacro-uterine ligaments lose their pull against the cervix, and it necessarily drops downward and assumes the axis of the vagina.

To overcome this overstretched condition, and to restore the strength of the superior plane of the pelvis is the object of all operations for prolapse and cystocele; in fact, we treat the condition upon the same lines as inguinal hernia.

The early operators sought to relieve the decensus and cystocele by building up a strong perineal body that should retain the prolapsed organs within the vagina. Embarrassing relapses almost invariably followed all of these operations. Simon, Sims, Emmet, Stoltz, Gersung, and various other masters in plastic surgery saw their work come to naught when tested by time, and for many years little interest was taken in devising other measures. Later, E. L. Dudley added a most important suggestion by shifting the point of importance to the lateral sulci of the vagina. A year later Reynolds added further important details along the same line.

Both Dudley and Reynolds were correct in principle but had not gone quite far enough.

It had been recognized for years that the elongated cervix was responsible for many relapses by paralleling the vagina and acting as a wedge. This wedge was constantly driven down through the vagina and finally overcame all plastic results obtained on the pelvic floor.

For a brief period surgeons became pessimistic, believing that plastic operations were usually unsuccessful, and resorted to hysterectomy in nearly all aggravated cases. The later history of such work was that they had added the disagreeable features of this mutilating operation and still had about the same percentage of prolapse of the vagina, bladder and rectum, proving that the uterus was only an element in the problem. The chapter on the relief of prolapse by abdominal fixation and suspension ends as unsatisfactorily as those already related.

Freund, according to Martin, made the first advance in what may be considered the new regime, by blocking the vagina with the inverted uterus. The uterus was inverted posteriorly into the vagina and fastened to the anterior and posterior walls.

Fritsch then conceived the idea of opening the anterior vault and using the uterus as a wedge, but the operation was a monstrosity in that it left the uterus free in the vagina.

In 1899 Watkins published the technic of an operation and emphasized the necessity of entirely separating the bladder, opening the peritoneal cavity, and suturing the vaginal flaps to the broad ligaments and fundus far out on either side of the uterus. Goffe made valuable additions to the principle of Watkins and Wertheim's technic by raising the bladder and resecting the overstretched fascia.

All of these later plastic operations, as you will note, were intended to entirely separate the bladder from the uterus, to deliver the fundus through an anterior incision, to secure the cervix high up in the hollow of the sacrum, and make a new firm base for the bladder out of the body of the uterus.

The next most important step in the technic is that devised by E. C. Dudley, and is no doubt the most efficient plan of treatment

yet suggested. In this operation the broad ligaments are utilized for keeping the cervix at the proper level in the hollow of the sacrum, and the sagging uterus is raised by bringing the severed bases of the ligaments in front of the cervix and attaching them together.

The first steps of this operation are practically the same as for anterior vaginal celiotomy. The bladder is stripped off of the uterus and pushed upward out of sight behind the pubes. The redundant vaginal layer is held aside and the lower two thirds of each broad ligament is severed close to the uterus to avoid wounding the utero-ovarian anastomosis. The severed ends of the broad ligaments are then pulled in front of the uterus and stitched together with chromic catgut. The redundant vaginal wall is cut away and the wound closed with chromic, or silk worm gut, in such manner as to prevent the bladder sinking to the former level on the anterior face of the uterus.

In a number of cases this method has given me the most satisfactory primary results. What the permanent results will be is yet to be seen, but, the cases have been dismissed with more assurance than after any other operation for this condition.

In aggravated cases of procidentia, hysterectomy is quite necessary. We find here the necessity for utilizing the broad ligaments quite as important as in the above mentioned operation.

This idea was first systematically worked out by the Mayos in supravaginal hysterectomy for fibroids to prevent prolapse of the cervical stump with the attached organs, and has been further elaborated by Dudley and Martin for application either in abdominal, or vaginal hysterectomy.

The requirements for a serviceable operation have been so clearly stated by Martin in a recent article that I reproduce his conclusions:

1. "That the supporting diaphragm of the uterus and bladder be made taut by elevating and maintaining the cervix uteri or the upper end of the vagina high in the hollow of the sacrum, opposite the junction of the third and fourth sacral vertebra.

2. This may be accomplished (a) by anteverting the uterus extremely, and anchoring the fundus beneath the bladder and

above the anterior vaginal wall, thus obtaining a strong uplift of the uterus through the intervention of its twisted ligaments, and at the same time forcing the cervix and upper end of the vagina far back in the pelvis; (b) by reefing or severing the broad and round ligaments in front of the uterus and thus lengthening the vagina by forcing the cervix backward, at the same time getting a strong supporting upward pull on the diaphragm from the effect of the shortened ligaments; (c) by attaching to the top of the vaginal tube and to each other the severed ends of the broad ligaments after vaginal parhysterectomy; (d) by attaching to the cervix after vaginal hysterectomy done through the anterior vaginal wall, the severed broad ligaments, the sacro-uterine ligaments, and the round ligaments, thus elevating and maintaining the diaphragm without sag by the strong uplift of the shortened ligaments."

Nothing has been said, so far, of the repair of the posterior vaginal wall. This is to be done according to any of the approved methods that the surgeon may prefer. Personally I have come to believe that the flap splitting principle of Tait gives the best results in this particular type of injury. The permanent results have been decidedly better than from other methods in the same number of cases.

I attribute this in a measure to one important feature of the dissection. After raising the flap the dissection is carried quite deep into the lateral walls and sulci of the vagina, but, in the mid line the vagina and rectum are separated probably only one-half this distance. In placing the sutures the levator ani is caught high on either side and dragged downward to be approximated to the opposite muscle beneath this loop. When the sutures are finally tied and released, the rectum and vagina are raised upward and forward to a considerable degree. This is the secret of success with the flap method and in extensive rectocele it appears to have special advantages over the ordinary operations.

DISCUSSION.

DR. CLARK: I had the pleasure of being in Boston last year when Dr. Dudley presented the operation which Dr. Miller has described to-day, and it received favorable comment from the

section on gynecology. I agree with him that the old operation for cystocle is a thing that should be done away with. It is merely a mucous membrane operation. Men who follow such operations will find that they will have many recurrences with only temporary relief in the vast majority. It was interesting to note the controversy recently between Drs. Watkins and Dudley as to priority of this operation. Dr. Duehrssens claims that neither originated it, since he has been performing it for a number of years.

DR. CHAVIGNY: The operations for uterine prolapse described as Watkins' and Dudley's operation are simply modifications and perfections of that done by German operators.

One of the greatest difficulties in performing the Dudley operation is the separation of the displaced bladder, which, as Dr. Miller states, can be easily separated by means of a sponge. The bladder can be so easily torn that in detaching it with sponge we should put all the pressure in the direction of the vagina.

DR. O'DONNELL: If the ordinary sound is introduced into the urethra there is very little danger of opening the bladder.

DR. MILLER (in closing): The condition to-day is treated as an ordinary hernia. There can be no good done unless the bladder is separated from the uterus, is pushed up and a new anchorage found for it.

Clinical Society of the Touro Infirmary Staff.

MEETING OF JANUARY 8, 1908.

DR. M. FEINGOLD, Chairman.

DR. SIDNEY K. SIMON presented "*A Case of Hysterical Hemorrhage of Obscure Origin*" in a young lady, age 23, unmarried, with some interesting features of a general hysteria. For the past ten years she has been suffering with a particularly severe form of hysterical singulutus, resisting all methods of treatment. Three years ago, when she first came under observation, she presented, in addition, an anorexia with almost complete lack of food con-

sumption in the twenty-four hours. She had lost as much as fifteen pounds and seemed to be much distressed over the possibility of starving to death. Under treatment, the appetite slowly returned and at present her status in this respect is normal.

The most interesting feature, however, is the development within the past two years of a tendency to repeated hemorrhages from the mouth. Exactly where this blood comes from has always been a mystery, in spite of close observation and examination by many competent to judge. The blood is of a bright red color and usually appears immediately following excitement or any form of emotionable disturbance. Very often she awakes in the morning to find her pillow covered with blood, which, she explains, as a result of a vivid dream. The hemorrhage when it has once started may last an entire day and usually stops as suddenly as it came. The hemorrhage and singultus may appear simultaneously. There is no connection between any of her nervous phenomena and the menstrual period. A close observation of the patient precludes the idea of a voluntary deception on her part. Hemophilia, as well as all other organic diseases can be excluded. She presents many zones of hysterical anesthesia, and some of hyperesthesia, over the skin surface.

That the hemorrhage has some close connection with the hysteria seems probable, but the true origin and localization has never been determined. Examination of the stomach contents gives a negative test for occult blood, and an inspection of the esophagus by means of the esophagoscope did not tend to clear up the mystery. All other higher sources for the hemorrhage have been carefully investigated with negative results.

The repeated loss of blood does not seem to exert any marked effect on the patient's general condition, which has improved somewhat during the past year.

DISCUSSION.

DR. MATAS: The neuropathic hemorrhages are the least understood. They are evidently dependent upon disorders of the sympathetic or vaso-motor nerves. Menstruation is a physiologic type of these hemorrhages and certain epistaxes, hemoptyses, gastror-

rhagis of a periodic type occurring in apparently healthy individuals as vicarious hemorrhages when the menses are suppressed, are conspicuous illustrations of this group. They are largely restricted to females or to hysteric males. All intense emotions, excitations of the nervous system may induce their appearance in predisposed subjects. The blood may appear in the sweat, the tears, in localized areas, forehead, palms, soles of feet, etc., and when appearing periodically is, as a rule, manifestations of hysteria. What is most characteristic of these hysteric hemorrhages is that they are rarely followed by the mental depression and physical exhaustion which is exhibited by normal individuals after hemorrhages. In fact, the hysteric seems to be psychically stimulated and exhilarated by these losses of blood. Some of these neurotics can provoke definite hemorrhages in certain peripheral areas at will, as in the case of the celebrated Louise Lateau and other stigmatized hysterics of the religious type, who would bleed in the forehead, hands and feet in imitation of the martyrdom of Christ.

Brown-Sequard, in his experiments could produce visceral hemorrhages at will by traumatizing the brain, corpora striata, floor of the 4th ventricle, tubercula quadrigemina, etc., and by injuring the sympathetic. Charcot and Vulpion, who confirmed these experimental results by clinical and pathological observations refer to this type of hemorrhages as "*purpura nerveux*."

In the hysteric or neuropathic hemorrhages the bleeding apparently occurs by diapedesis, the blood escapes without apparent rupture or lesion of the vessel walls. In illustration of this statement, the speaker related a case of profuse hematemeses in a profoundly neurotic girl who suffered with hallucinations and illusions; the hemorrhages were finally arrested without operative interference. She subsequently died from other causes not long after her recovery from the hemorrhages, and an autopsy failed to show any gastric ulceration or erosion that would account for the profuse hematemeses. Dr. Simon had laid stress on the obstinate singultus in his case. This, in the speaker's experiences, is indeed one of the most characteristic and persistent of grave hysteric phenomena. He related a case which he had observed years ago in his father's practice, which had persisted more than 10 weeks almost continu-

ously. The peculiar loud, almost explosive noises heard at a very considerable distance from the patient, led the woman to be known as "The clucking woman." The singultus stopped abruptly one day, leaving the woman apparently unaffected physically by its long duration. Such a hiccough in an ordinary individual would have proved fatal by exhaustion.

Anorexia nervosa in the hysteric was also a grave complication when prolonged and associated with profound marasmus. Dr. Simon's case also recalls an instance of this type of hysteria, so well described years ago by Sir Lyon Playfair, in which the speaker had been compelled to resort to gavage, or systematic feeding with a stomach tube twice daily for three weeks. The patient was remarkably tolerant of the tube; in fact appeared almost devoid of the pharyngeal reflex, and feeding with the tube seemingly imposed no hardship upon the patient. The gavage was kept up steadily until the patient herself abruptly made this procedure unnecessary by sitting at table and eating her repasts with the family as if nothing had occurred to interfere with her appetite. She gradually recovered her normal weight. Such and so curious are the ways of the hysteric.

DR. VAN WART presented a case of an "*Occupation Neurosis in a Deaf Mute.*" The patient, a man, earned his living by making garters. This necessitated a great deal of sewing and led to the development of cramps in the extension muscles of the fingers of both hands. These were very painful and passed off after from one to three minutes.

After trying various methods of treatment without result he was finally relieved by the application for five minutes twice daily of a rubber tourniquet to the arms. He has now been free from attacks for two months.

DR. W. KOHLMANN reported "*Cases of Retroflexio Uteri, with Observations.*" According to the observation and opinion of Schultze, which is now generally accepted, the normal position of the uterus is an anteversio-flexio. This position, though, is not a fixed one. The uterus is movable within certain limits. The full bladder pushes the organ backwards. The filled rectum makes the anteverted position more distinct.

The retroflexion of the uterus is the most frequent abnormal position and has been treated by orthopedic and operative measures. Many methods have been suggested to hold the uterus in the normal position (in a surgical way) by surgical means.

Fixation of the uterus was attempted on abdominal walls, on vagina, bladder, but mainly have the ligaments been shortened, to keep the organ in normal position, the round ligaments as well as the sacro-uterine ligaments. There are too many modifications of the different operations that it would lead us too far even to mention them all, nor will I enter on the question of the indication, which operation would be the more advisable one, only so much I may say, that in my opinion it will be best to make an Alexander operation if the uterus is freely movable, and to make the ventrofixation, if the uterus is fixed by adhesions or as a secondary operation, if, after removal of inflamed adnex tumors, it is advisable to keep the body of the uterus out of the posterior cul de sac, to prevent new adhesions.

If the fixation on the anterior abdominal walls is indicated, the best method is the one of Olshausen, who was the first one operated in 1886 for movable retroflexion according to this method. He recommended the fixation of the round ligaments instead of the body of the uterus. The advantage of this operation is the free mobility of the uterus, which prevents the much spoken of danger in case of following pregnancy, and which prevents the annoying disagreeable sensations, which some nervous women have by every movement of the abdominal muscles, on account of the sometimes very dense adhesions of the uterus itself. In the method of Olshausen the possibility of recidive is rather great, about 20%. This is due to the fact that only a small surface of the peritoneal covering of the ligament is in contact with the parietal peritoneum.

During the past year Loepman described a new operation for the ventral fixation of the round ligaments as recommended by Bumm. After the usual abdominal incision he loosens the parietal peritoneum about 2 inches back, makes a small opening in it and draws a fold of the round ligament about 1 inch from the uterine end through this opening. In that way a broader contact of the parietal peritoneum with the ligament is established, at the

same time forming an artificial covering of the ligament imitating the processus vaginalis peritonei. Another advantage of this method is the fact that the ligament is fixed on the submuscular intercellular tissue, which makes a stronger adhesion possible.

For the last 2 months 5 cases have been operated according to this method in my service and the immediate results in regard to the position and elevation of the uterus have been surprisingly good, superior to the methods which I employed before, either fixations of the round ligaments or of the uterus itself.

DR. J. D. WEIS showed "*Charts of Ten Cases of Typhoid Fever*" with special reference to the fact that, where the urine had been increased to over 75 ounces in 24 hours by large amount of water ingested, the temperature had always been lower.

DR. JOSEPH CONN reported the following case:

Mrs. E. B., 37 years, housewife. Family history negative. Had measles when a child. Menstruated at 15 years. The intermenstrual periods were sometimes as long as 6 weeks. Flow was excessive. Duration, 9 or 10 days. She had pain several days before and during menstruation. She married at the age of 19. She has had 7 children. The first was premature, the last two required instrumental delivery.

Five months ago the patient ceased menstruating. Her abdomen enlarged, and she had morning nausea. She also had a pain in the right iliac region. She felt well until 6 weeks ago, when she was seized with severe backache, and pain in the abdomen, which became rapidly enlarged. For 8 days she did not have a stool. She vomited constantly and had frequent urination; no fever. The abdomen was tender and tympanitic, and the pulse was 150.

She was admitted December 23, 1907, walking in. Operation: median incision was made and the gravid uterus found. An aspirating needle was inserted in right side and bloody fluid withdrawn. Incision was then made along outer border of right rectus muscle. A large cyst was found, the fluid was evacuated. The sac was separated from the liver and intestines, to which it was adherent, and traced to the right ovary. The pedicle was ligated and the sac removed.

On January 7 and 8 the vaginal discharge was more profuse

and of a foul odor. On January 10 and 11 the membranes ruptured. There were no efficient uterine pains.

That night the cervix was dilated with Barnes' bag, and the fetus turned and delivered.

The diagnosis was reserved in this case, which resembled an extra uterine pregnancy, and on opening the abdomen the condition was found to be a very large ovarian cyst.

DR. MATAS (Discussing Dr. Conn's paper): Dr. Matas related an experience which he had had in the Infirmary five years ago when called upon to attend an Italian woman who was suffering with all the symptoms of peritonitis. She had miscarried a month previously, but persistent metrorrhagia had followed, for which she had been curetted twice by two different practitioners. After the last curettage acute peritoneal symptoms had developed and the patient became critically ill. She was then brought to the Infirmary, where an examination revealed a globular tumor behind the uterus like a large and adherent pus tube. Laparotomy was performed by Dr. Matas and the tumor was found to be a large mass of absorbent cotton covered with a dense capsule of exudates, omentum and intestines. The cotton had found its way into the peritoneal cavity through a rent in the posterior uterine wall, evidently the result of a perforation with a curette, the cotton having been forced through the uterine wound in an attempt to arrest bleeding. The pack was removed, the wound in the uterus being closed by sutures. The woman recovered.

DR. MATAS also reported the following case: "*Extra-uterine, intra-peritoneal pregnancy on a level with the stump of the right uterine cornu, two years after the extirpation of the corresponding right ovary and Fallopian tube for a strangulated ovarian cyst caused by twisting of the pedicle.*" In this case the relics of an embryo of nearly four months' development were extracted by laparotomy, together with a ruptured and degenerate sac. The embryo was found outside of the sac in the midst of a massive clot and dense exudates. The sac was adherent to the uterine body and right broad ligament simulating a large fibro-cystic tumor. The left tube and ovary were normal. The right cornu of the uterus showed a cicatrix where the tube had been cut off.

Conception of the right side could only be accounted for by the accidental dropping of a fecundated ovum from the fimbriated extremity of the opposite and *only* Fallopian tube. It is not easy to account for this extraordinary occurrence, especially when the position of the sac to the extreme right of the uterine body is considered. Such a migration of a fecundated ovum can only be accounted for by appealing to the influence of intestinal peristalsis in favoring the dislocation of the ovum. In spite of profound anemia the patient made an uninterrupted recovery and was discharged from the infirmary within four weeks after the operation.

DR. MATAS reported a case of "*Tuberculosis of the Colon.*"

Exhibition and demonstration of a specimen of tubercular ulceration of the transverse colon, extending continuously throughout the entire length of the transverse colon from the hepatic to the splenic flexure; separate areas of ulceration in the ascending colon and cicatricial stenosis of the descending colon at the middle third, allowing only gas to leak through a minute opening and causing chronic intestinal obstruction.

Circular resection of four inches of the descending colon, including the cicatricial stricture with invagination and closure of both ends of the divided gut, leaving the stumps attached to the edges of the abdominal incision in the left lumbar region. Creation of cecal anus in right inguinal region in which the dilated stump of the appendix was utilized. Profuse and progressive hemorrhage from artificial anus on second day, in the midst of complete calm and while patient was rapidly recovering. Hemorrhage continued uncontrolled in spite of every effort to check it. Artificial anus dilated and blood apparently came from the colon high up and small intestine beyond ileo cecal valve.

Failure of gelatin, chloride of calcium and saline solutions given by hypodermoclysis and of nitrate of silver, gelatin, ergotin, bismuth and opium. Death on the third day from acute anemia and exhaustion. Autopsy reveals seat of hemorrhage to be an ulcerated area in the transverse colon where the hemorrhage was started by the displacement of an enormous fecal accumulation incident to the irrigation of the colon.

The patient, Mrs. W. E. A., aet 53, was admitted to the Infirmary

ary on November 18, 1907, suffering with symptoms of chronic intestinal obstruction.

Previous History.—During the past 8 or 10 years has been troubled with constipation. Four years ago in August he had the first attack of partial intestinal obstruction, which lasted 3 days, and was finally relieved by purgatives. The attack came suddenly with pain in the abdomen, nausea and vomiting and distension of the abdomen. Since the first attack in 1903 he had three other severe attacks until May, 1907. Each attack of obstruction increased in severity and stubbornness. Since May 1907 he has had one attack each month and while these were apparently relieved by movement of the bowels and expulsion of gas, he continued to feel badly in the intervals with symptoms of distention, belching and abdominal uneasiness which he attributed to "chronic indigestion". The last attack, which brought the patient to the Infirmary, began on November 14 with an uncomfortable feeling in the abdomen and a constant desire to go to stool without accomplishing results. His distress and obstipation increased steadily in spite of large enemas and colonic irrigations. After his admission he felt better, some gas and fecal stained fluid being expelled after systematic irrigation of the colon with hot soap suds, glycerin, spirits of turpentine and asa-fetida. On the 24th he again felt worse, after taking a dose of Hunyadi water, and on the 25th an exploratory laparotomy revealed a stricture of the descending colon from cicatricial contraction. The stricture had all the appearance of a neoplastic obstruction, suggesting a circular epithelioma. This led at once to its extirpation by colectomy. Closer inspection subsequently convinced the operator that the thickening of the intestine about the stricture was due to secondary hyperplastic changes about an old cicatrized ulcer, probably tubercular. Great relief was immediately obtained by the formation of the artificial anus at the cecum. A great quantity of semi-solid feces, the consistency of soft mud, was discharged through the large tube attached to the cecum. The tube became clogged frequently and was cleared out by irrigation with warm saline solution, which was used to dilute the feces. In this way buckets of fecal matter were discharged

almost continuously until the evening of the second day, when in the midst of complete calm and great comfort, the patient felt a sharp pain in the epigastrium, followed shortly by an escape of blood at the artificial anus. The pulse rapidly rose from normal to 150, the skin became cold and clammy and pale. The blood flowed rapidly and in great quantities. Not knowing the source of the hemorrhage the artificial anus was dilated sufficiently to expose the ileo-cecal valve. Blood appeared to come through a tube inserted into the small intestine through the ileo-cecal valve, and also from another tube inserted high up into the ascending colon.

In the light of subsequent findings it is evident that the blood which came from the small intestine must have forced its way into it from the cecum, by regurgitation. A few hours before death the hemorrhage apparently ceased, no doubt in consequence of the extreme feebleness of the circulation. At the autopsy the source of the hemorrhage in the colon was not only plainly revealed in the erosion of a mesenteric artery at the bottom of the ulcer, but was explained by the fact that the ulcer had been covered by a stagnant mass of fecal mud which distended the gut. In addition to the compression anemia produced by the distention, the ulcerated area had been protected for a long time with a plastic coating of fecal matter which had lost much of its virulence by age. By the creation of an artificial anus and by irrigation, the liquid feces were displaced, leaving the ulcerated surface uncovered and disturbed by active peristalsis. It is evident that the mere creation of an artificial anus would have been followed by the same results, and that the extirpation of the strictured area played no part in the fatal termination.

Orleans Parish Medical Society Proceedings.

President, DR. AMÉDÉE GRANGER.

Secretary, DR. E. M. HUMMEL.

141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. E. M. HUMMEL, Chairman.
DR. HOMER DUPUY and DR. S. K. SIMON.

MEETING OF FEBRUARY 8, 1908.

DISCUSSION OF DR. ALLEN'S PAPER ON NON-GONORRHEAL PROSTATIC DISEASE, ETC.

DR. LARUE: I would like to say that when we have a case of neurasthenia in which the symptoms persist, after all customary remedies have been tried, we could look to the prostate gland. I do not believe that the prostate is as often the cause of neurasthenic symptoms as Dr. Allen's paper would lead one to think, but rather that there is more often a primary neurasthenia incident to which a mild prostatitis sets up as a result of the general nervous involvement. It is significant that one of Dr. Allen's cases required five months for recovery. I recently had a case of neurasthenia with prostatic symptoms which recovered with mere toning up of the general system, and without treatment directed to the prostate.

DR. SALATICH: I now have under treatment a case of prostatic trouble which presents no history of gonorrhea or other venereal disease. The patient, however, uses alcohol and tobacco moderately, and indulges in venery to excess. He suffered from pains in the back and legs, and had other reflex disturbances of this kind. The prostate was enlarged to the size of a lemon and was tender. I advised strict abstinence from alcohol and sexual intercourse, and used cold rectal douches and general tonics. At the end of ten days the pain and acute symptoms had subsided and the patient is better in a general way.

I have under observation another case, a drummer who had been riding a great deal in a buggy lately, and it seems that this had excited the prostatitis. This case has improved greatly in the

space of three weeks, under treatment, cold douches, massage and general tonics.

DR. NELKEN: I have occasion to examine several hundred prostates in the course of a year, some of them simulating the cases Dr. Allen has reported. My experience has inclined me to look upon the prostatic symptoms in this class of patients as possibly less significant than the essayist seems to believe. In many of these painful, freely secreting prostates, I think the cause is often unsatisfied sexual excitement. Those of us who have dealt extensively with this class of patients know that they are quite commonly untruthful in their statements relative to the cause of their trouble. Most of these cases with no history of gonorrheal infection are found in that class of individuals who excite themselves sexually, stopping short of actual intercourse.

A few years ago massage of the prostate was rarely done; now it is a most frequent procedure, and I am inclined to believe is carried to excess, massage at times being so vigorously done as to contuse and cause bleeding. Massage may be carried to extremes, to the neglect of other measures, and thus attention is distracted from important neighboring structures which are often more seriously involved.

A peculiar thing about gonorrheal infection of the prostate is the tendency of the secretions therein to become sterile in time, as may be demonstrated by successive microscopic examinations of the fluid and by cultures. The same thing is true regarding Fallopian tube infection and gynecologists have long recognized the desirability of delaying operation in such cases, where possible, until the pus has become sterile. All these points should be borne in mind in the treatment of prognosis of prostatitis.

DR. ALLEN (in closing): In writing the paper just read, one of my main purposes was to show the possibility of prostatic trouble without gonorrheal infection. I did not mean to imply that all cases of neurasthenia associated with prostatic symptoms are due to the prostatic trouble. Dr. Nelken has spoken of the tendency of pathogenic organisms to diminish and finally disappear from prostatic and tubal secretions in instances where infection had been present. Such is the case, I agree, in many instances.

On the other hand, gonococci have been found in secretions in the male as long as 26 years after original infection. In other cases, I recall to mind the organism has reappeared after 18 and 20 years, respectively. This is sufficient to prove that organisms may be long-lived in these parts, notwithstanding.

The lack of virulence of the organisms in women with old tubular infections is quite well known. Nevertheless, they occasion much suffering and necessitate subsequent removal of the tubes and parts involved.

DISCUSSION OF DR. PARHAM'S PAPER.

Dr. Parham being unable to attend, DR. CRAWFORD presented a portion of his announced paper, entitled, "*Resection of Cecum and Portion of Ileum for Tubercular Disease.*"

DR. MILLER stated that several interesting features of the case were worthy of discussion, and was sorry Dr. Parham was not present to discuss them at length. One of these was whether Dr. Parham preferred end to end anastomosis as a rule in this type of cases, or adopted it in the present instance because of the dilated ileum. In anastomosis of the large bowel it is generally thought that lateral anastomosis is the better procedure. Another point of interest is the effect of exclusion in ileo-cecal tuberculosis. Since we are treating surgically more tubercular intestinal lesions than ever before, it would be interesting to have Dr. Parham's experience with exclusion of intestine as compared with primary resection. Even when fistulæ have developed the results of exclusion have been satisfactory and tubercular masses have gradually disappeared. In cases without fistula the results have been surprisingly satisfactory. We know the advantages of exclusion in acute obstruction, gangrene, ileus, etc., and if the urgency of the case does not demand immediate resection, a preliminary trial of simple anastomosis may furnish us with a valuable aid in tubercular cases not strong enough to withstand the ordeal by resection, or where the lesions are so extensive as to make primary resection extra hazardous.

DR. CRAWFORD (in closing): Mikulicz, in dealing with malignant growths or inflamed conditions of the intestine, adopts the

following method: The involved loop of intestine is dragged out of the abdominal incision and the contiguous surfaces of intestine and skin stitched together. After secure union has formed between these stitched surfaces, he shaves off the protruding loop of gut on a level with the external abdominal surface. The peritoneal ends of the severed intestine then present like the muzzles of a double-barrelled shotgun. After waiting a brief time, during which the outer intestinal walls, or those stitched to the skin, tend to approximate, he grasps the two inner gut walls, which have remained contiguous to each other forming the partition between the two intestinal lumina, with rather broad and long retention forceps. The forceps are put on with enough force to cause sloughing of the tissue caught between the blades. After the forceps have sloughed off, the two walls of gut being so dealt with are left united at a lower point. By this means the posterior or lower intestinal wall is left straight, and to complete the operation it only remains to allow the lips of the original abdominal incision with the gut walls adherent thereto to grow together, or if so desired, these can be united by suture.

DISCUSSION OF DR. GESSNER'S PAPER ON

. EXCISION OF SHOULDER IN OLD REDUCED DISLOCATION.

DR. LARUE: The case Dr. Gessner has just reported is most interesting. There are two points of special interest: First of all, the impossibility of reposition of the head, notwithstanding the absence of any serious impediment to such reduction. As confirmed by the operation, there was no exudate, no obstruction by the lacerated capsule or muscles, nothing to interfere with the reduction. The second point of interest is the presence of osteoporosis, as far down as the surgical neck. The question is, what was the cause of this rarefaction? It seems to me there must have been some obstruction to circulation in the bone. Dr. Gessner did a splendid operation in adopting the subperiosteal method of resecting the head. This is especially important in young subjects, particularly when we bear in mind that the periosteum is an osteogenetic membrane. By sparing this important

structure, we may finally obtain the same length in the operated limb as in the sound part of the opposite side.

DR. GESSNER (in closing): I have very little to say further, except to more fully bring out the point that there was nothing found in the glenoid cavity to interfere with reposition of the humeral head, which was rather strange. However, it was noted during the operation that muscular contraction was very pronounced, and I am inclined to believe that this alone defeated our efforts at reduction. Dr. Perkins assisted in the efforts at reduction, and our failure was in spite of all the muscular strength and weight he could apply judiciously. In regard to the osteoporosis, this might have been due to the lack of function for four months, from the immobile position in which the head was caught. The rarefied condition of the bone was very noticeable, and I recall distinctly with what ease the Gigli saw severed the osseous tissue. The saving of the periosteum is undoubtedly a good step in such operations, as we thereby insure the reproduction of bone, so desirable.

My main purpose in reporting this case is to demonstrate the possibility of giving good joint function by resection, where reduction is impossible. While teaching the technic of this operation and demonstrating the advantages to be derived from resection of joints to the students at the college, I have often noticed how incredulous they seem as to the ultimate usefulness of a joint so treated, and I believe this same attitude is maintained by many practitioners. Numbers of cases so treated show good results—infinitely better joint function than could have been hoped for without operation. I recall the case of a street car conductor operated upon some time ago in which resection of the shoulder joint was done. His arm is now nearly as useful to him as if the joint were normal.

REPORT OF CASES.

DR. BASS (*The Ophthalmo-Tuberculin Test*): Since the ophthalmo-tuberculin test has come in use, I have received numerous inquiries as to where the tuberculin solution can be had. The solution, or tablets for making same, are to be had from Mulford or Parke, Davis & Co.

Since reading my paper before this society on the subject, I have used the test twice on a case of tubercular (?) adenitis with negative results both times. Subsequently the patient was operated upon and the glands were found tubercular by Dr. M. Couret. Five days after operation the patient gave a distinct positive reaction, using same test in same strength.

DR. GESSNER (*Report of a Case of Tricocephalus Dispar Infection*): Recently I had occasion to treat a child presenting symptoms suggestive of hook-worm. There were four children in the family and they were all rather anemic. I sent a specimen of feces from the child under treatment to Dr. Simon for examination. He reported the finding of eggs of *tricocephalus dispar*. I understand that this parasite is quite commonly found, especially in children in European countries. So far as I know, it is comparatively harmless. I should like to obtain from one of experience with intestinal worms information as to the prevalence of the parasite in this community, or any other information bearing on the subject.

DR. SIMON: I examined the specimen sent me by Dr. Gessner for hook-worm eggs. Consequently, my discovery of the whip-worm eggs was incidental. They are not usually present in large numbers, and can, for that reason, be readily overlooked. The text books infer that this parasite is very common, but, as we know, almost all our text books are written by Northern men, and the statements are not always applicable to our section. I am inclined to believe the worm is more specially indigenous to certain communities. Some authorities claim it may produce a certain amount of anemia in its host; others affirm its entire innocuousness. The worm itself is not found in the feces. It is about two or three inches long and belongs to the round-worm family.

I should like to hear from other members present, familiar with feces examination, as to the frequency with which this worm is found in the South.

DR. BASS: I remember some time ago examining some twenty specimens of feces from the inmates of St. Vincent's Asylum. Whip-worm eggs were present in over twenty per cent of the

number. Three years ago I examined a large number of specimens of feces sent me from Mississippi, and since then several specimens from various localities of the same State, making in all several hundred. I would estimate that from 5 to 6 per cent were found to contain *tricocephalus dispar*. I believe it is more prevalent than is recognized. The eggs do not, as a rule, exist in large numbers. The worms are also few in number in most cases here. An ordinary smear of feces will show one or two eggs usually. Perhaps the small number of eggs explain their being overlooked, as of common prevalence. My experience prompts me to say that the worm is common in this community, but they produce no pathologic results in ordinary numbers.

DR. SIMON: I can corroborate what Dr. Bass has said about the limited number of eggs. I failed to detect them in this case at first, but succeeded after using a method which seems worth calling attention to. I first centrifugalized the feces, washed and again centrifugalized several times. In this way I managed to find ten eggs on one slide, where direct examination of the feces was negative.

DR. DASPIT: I would like to ask Dr. Bass if whip-worm seems to be in anywise associated with uncinariasis? Relative to the prevalence of whip-worm, I would say we see the eggs very often in fecal specimens in the hospital laboratory.

DR. BASS: Whip-worm is in no wise associated with uncinariasis. The two parasites, however, may infect the same patient.

MEDICAL NEWS.

DR. DEMPSEY: As medical news, I would like to speak of the recent work done by the Antituberculosis League of Louisiana. We now have accommodations for fourteen patients in the pavilion across the Lake. An initial fee is charged to those wishing admission, by way of defraying the expense of their passage over there, and not for accommodation at the sanitarium, which is purely charitable. No advanced cases will be admitted. Those wishing admission must apply to Dr. G. S. Bel for examination; who will pass upon the curability of the patient and issue the proper certificate. We have nearly finished our work of educa-

tion in the public schools in the city. Recently we have secured the co-operation of the State Superintendent of Education to have the same work done in country parishes. There is still some work to be done in city schools, and we want volunteers to lecture at the needed places. Of late arrangements have been made for securing records of cases among school children in some of the schools, and further efforts will be made to amplify this arrangement.

· MEETING OF FEBRUARY 22, 1908.

DISCUSSION OF DR. SEXTON'S PAPER ON
INFECTION OF THE EXTREMITIES.

DR. BASS: I can't pass the opportunity to emphasize the importance of drainage of pus cavities when the infection persists for some time. It has been observed that the older pathogenic bacteria grow the less susceptible to phagocytosis they become. This is true of the staphylococcus and streptococcus. Now when proper irrigation is practiced, the older cultures of the pus-producing organisms and their toxins are carried away in the irrigating fluid, whereupon the younger cultures are pushed to the surface and left more exposed to phagocytic action. The gonococcus is another organism acquiring great resistance to phagocytosis as it ages. I have noticed that cultures 24 hours old have become almost immune to the action of the phagocytes. The importance of irrigation is therefore made the more notable by the mechanical removal of bacteria by the fluid.

DR. DASPIT: I would like to ask Dr. Sexton if he has had any experience in the use of Balsam of Peru in treating non-specific infections of the extremities. There appeared recently in a German journal reference to the use of this drug, with good results. As stated, it seemed to have the effect of anchoring the germs left after irrigation.

DR. SALATICH: I would like to ask Dr. Sexton whether he has used the Bier method of treating inflammatory conditions, especially in instances of infection of the hand and other extremities?

DR. SEXTON (in closing): Responding to Dr. Daspit, I would say that I have used Balsam of Peru and castor oil in proportions of 1 to 16, respectively, as advocated by Dr. Matas. This mixture was used in a case of liver abscess. After opening and irrigating the cavity, a pack soaked in same was inserted as a dressing. As to the action of balsam in anchoring germs, I cannot say. I may remark that I was successful in this case.

I recently had a case of violent cellulitis, where the patient's resistance had been lowered by beer and alcohol and consequent nephritis. The hand was the part involved, and there was considerable sloughing of the tissue, even up to the elbow. Some time ago I perhaps would have used peroxid irrigation and employed vigorous means in dislodging the infectious agents. I now, however, regard the use of peroxid as rather harmful, as it is apt to push pyogenic organism before it and spread the infection. Experience has taught me that rest and gentle manipulation are necessary precautions in the presence of virulent infections. The case in question lingered for 6 or 8 months, going through the hands of several surgeons, and finally recovering with such extensive contractions as to cause some question in my mind as to whether the limb had better been amputated. I mention this case to show what serious final results sometimes follow an originally trivial infection, as the trouble began with several small sinuses, which were neglected. Rigid asepsis should be observed in treating pure slight abrasions of the extremities.

Relative to the Bier method of treating inflammation, I am inclined to think well of it, although I have not had much experience with it. The other day, while dressing an infected wound, I accidentally got my finger inoculated, and by way of treatment I applied a small rubber band about the finger while sitting in my office. The finger promptly got well. I recently treated a man from the country with six or eight furuncles on hand and forearm, using the Bier hyperemic method and injecting anti-streptococcic serum. His temperature quickly subsided and he returned home much better.

It was not my intention to say anything new to-night. In conclusion, I wish to condemn the former practice of too much

manipulation of severely infected extremities and irrigations with strong peroxid. Even though the infection be trivial, the part should be put at rest, splinted if necessary to keep it still and gentleness and care employed when irrigating and dressing lessen the foci of infection to spread. Frequently we permit patients with infected extremities to walk about and move the part freely, when they should be at absolute rest and probably elevated.

DISCUSSION OF DR. MARTIN'S PAPER ON
GUNSHOT WOUNDS OF THE ABDOMEN.

DR. FENNER: At one time I took a great interest in these cases, but now I am no longer a specialist in this line, as I am not connected with the Hospital staff any longer. I cannot forego commenting on Dr. Martin's paper and correcting the impression his statistics leave, if taken alone. It has always been considered best to leave unoperated cases where the bullet has traversed the lower thorax or upper abdomen. Likewise penetrating wounds in the region of the liver are better left alone, unless there is evidence pointing to extensive hemorrhage. I believe that if Dr. Martin will look up the past statistics of the Hospital he will find them at variance with those he has just presented. My impression is that the records of cases at the Hospital before operation were in vogue show about the same mortality as operated cases. I am speaking now of the Hospital records several years back; but I can hardly believe that bullets have changed so in the past few years as to now inflict an essentially different wound.

DR. PARHAM: I think it is rather unfortunate that so many cases recovered without operation, as the obvious inference from these cases, if taken alone, is misleading, and deters one from following well-established surgical principles. Some regard must be had for the interim elapsing between the time the wound was inflicted and when seen by the surgeon. I have in mind the case of a man recently brought to the Sanitarium from Mississippi, who had been shot fifteen hours previously. Upon examination I found no sign of peritonitis; the pulse and temperature were good. I did not open the abdomen. However, I am rather con-

fidant that had I seen this man ten or twelve hours sooner, I would have deemed it advisable to operate.

When a case is seen early, unless one is reasonably sure the bowel has not been wounded, it is not good surgery to wait for peritonitis to supervene as a further indication for operation; if the case is seen within twelve hours after injury, it is good surgery to operate. More cases of perforation, I believe, are saved by operation under these circumstances than by waiting. In one of the cases reported by Dr. Martin, the bullet entered about two inches to the left and on a level with the umbilicus. Now, a missile entering the abdomen at this point is almost certain to wound the small intestine. No mention was made as to the interval intervening since the reception of the injury, but given that the case was seen early enough, it was bad surgery not to have operated. If I were shot, and there were no reasonable assurance that there was no injury to the bowel, I would certainly consent to have my abdomen opened. With perforation there is almost certain to be peritonitis and probably fatal termination. I recall a celebrated instance that occurred in Kentucky: Two men engaged in an encounter in a postoffice, one using a knife, the other a pistol. The one wounded with the knife died at once, while the other was taken to Cincinnati and his abdomen opened over 12 hours after he was shot. He died promptly from peritonitis and shock.

It is the consensus of opinion among the majority of surgeons with experience that, unless the intestine has not been wounded, and we are able to judge as to this to a large extent by the wound of entrance and exist, it is our duty to open the abdomen.

DR. SALATICH: When I was a resident student, Dr. Shands looked up the Hospital records for ten years, from 1895 to 1905, and found that more cases recovered with operations than without.

DR. STAFFORD: I have about decided that gunshot wounds of the abdomen are not cases for surgical interference. The mortality with operation is dreadfully high, very few getting well after operation, whereas the greater number get well if let alone.

The rule I follow now is to put the patient to bed with an ice bag to abdomen, enough morphin to keep patient quiet and

prevent peristalsis. Nothing by mouth for at least 48 hours. The head of the bed is elevated at least 18 inches, and if I think the descended colon is not injured I give the continual hot saline rectal irrigation; if I suspect injury to the descending colon, I replace the rectal irrigation with hypodermoclysis, giving about one quart twice a day. In the last 15 cases treated this way I have lost only two. Formerly I operated. I closed the abdomen without drainage; then I drained in front, then behind and to the side. I flushed the cavity wall with normal salt solution, then tried cases without flushing; the results were always the same. Sometimes I doubted whether my technic was the best, but upon observing the work of other surgeons I found their results were quite the same. I starved some of my cases and I fed others; they died just the same. Some would live seven or eight days and then die. I followed most of my cases to the dead house and was struck by the fact that nature could and did cure intestinal perforations. In one case that died 18 days after operation from a pelvic abscess around the bullet there was found two perforations that had been missed in the surgical operation but which nature had closed by agglutinating the surrounding bowel. A few of the cases that did get well without operation developed fecal fistula which closed, though without surgical interference. I think I have operated on about 15 cases and only 3 have gotten well. Of the last 15 cases that I have seen only two died.

DR. J. F. OECHSNER: I think much depends upon the conditions under which the operation is done. When a resident student I saw a case operated 24 or 36 hours after being shot. Some of the perforations were found already closed by agglutination, substantiating what Dr. Stafford has said on the same point. In this instance the operator reopened the perforations and sutured them. I believe this case would have recovered if it had been left alone. I am inclined to think that shock from too much handling the viscera plays an important part in these cases. I believe with Dr. Parham that all cases with perforations should be operated upon. Dr. Martin seems to be rather enthusiastic over the results in non-operated cases.

DR. MARTIN (in closing): Dr. Oechsner must not have heard my paper in full if he got the impression that I was enthused

over the results of non-operated cases. I was not aware that I displayed any enthusiasm at all; I was merely impressed with the fact that so many consecutive cases noted in the reports presented should have recovered, and I thought this subject worth looking into. It seems to me that the rule to operate on *all* cases where the intestine has been perforated is a mistake. Severe hemorrhage necessitates operation. A profoundly shocked patient, especially if he has developed peritonitis, should not be subjected to the additional shock of operation. I remember when a resident student seeing Dr. Miles operate on a case with sixteen perforations made by one bullet, with recovery. In this instance there was little shock. I reported this case before the Southern Surgical and Gynecological Association several years ago.

There are three cases in my ward at the Hospital now, none of which have been operated, and two are recovering.

If the intestine is empty at time of perforation, agglutination and closure is very apt to take place. In teaching I have been accustomed to emphasize the fact that the bullet inflicts most of the damage at the time of entrance, and that very little harm comes of subsequent developments. If there is no severe shock or hemorrhage, it is better not to operate. If the case is profoundly shocked, it seems to do just as well if left alone.

Communication.

NEW ORLEANS, March 18, 1908.

Editors NEW ORLEANS MEDICAL & SURGICAL JOURNAL, City:

GENTLEMEN:—As a matter of general information to members of the Charity Hospital of Louisiana Alumni Association, I have been requested by the President to forward the letter below for insertion in your Journal. It is hoped, in addition, by this means to bring to the immediate attention of the entire Visiting Staff of the Hospital a subject of much importance to their interest. The letter is published with permission of Doctor E. S. Lewis.

Very truly yours,

SIDNEY K. SIMON, Secretary.

LETTER.

New Orleans, March 10, 1908.

"To Dr. Sidney K. Simon, Secretary of the Alumni Association, Charity Hospital.:

"Dear Doctor—At the monthly meeting held last night a communication from the Alumni Association was read which should have been presented to the Board at the meeting in February, but for an oversight on the part of Secretary Marks. The Vice-President was directed to reply to this communication. It appears to me the resolution of the Board is sufficiently explicit; that the visiting staff appoint a conference committee, subject to be called upon by the Board whenever in its judgment such conference is deemed advisable. The committee may be called upon in a month or it may be six months. No date was fixed by the Board. The committee is to be appointed from the Visiting Staff and not from the Alumni Association. You will bear in mind that many of the Visiting Staff are not graduates of Tulane University. Yours very truly,

"(Signed) E. S. LEWIS, M. D.,

"Vice-President, Charity Hospital."

News.

A. M. A. NOTES.—Dr. J. N. McCormack, the chairman on organization of the A. M. A., spent a large part of the month of March in Louisiana visiting the various county societies, together with Dr. Dowling, President of the State Society. The members of the Orleans Parish Medical Society, the Faculty of Tulane Medical Department, and the student body of this institution, were entertained by a running talk on the homelectics of the practice of medicine, which was delivered at the Richardson Memorial, on Canal street, on the evening of Wednesday, March 25. A considerable gathering of the New Orleans public and of the profession in general heard Dr. McCormack in a lecture on "What the Public Should Know About the Doctor", at the Atheneum, on the evening of March 28, of which full reports were given in the daily press. Other speakers on this occasion were Right Reverend James H. Blenk, Dr. E. B. Craighead, the President of Tulane University, and the Reverend Beverly Warner.

N. O. Medical and Surgical Journal

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The State Society Meeting.

We desire to remind our readers, and especially the members of the Louisiana State Medical Society, that the time for the meeting in annual session of that body is fast approaching.

The meeting is scheduled for May 12, 13 and 14, at Alexandria, and should be largely attended. Alexandria is one of the largest towns of the State and is of far more importance even than its population would indicate. A railroad center, its inhabitants are busy and hustling and the place is progressive in the best sense of the word. A large new hotel will add to the solid attractions of the town.

The local profession is enlightened, possesses *esprit de corps*, and can be depended upon to do all of its share in making the meeting a success.

An unusually low railroad rate, practically half-fare, has been secured, so it only remains for the members to do the rest by arranging to attend.

The President, Dr. Oscar Dowling, has been very active as well as the other officers and the committees. Their efforts should be repaid by the presence of a large and interested attendance.

The society has the habit of breaking records. It must keep it up and we earnestly call upon the New Orleans members to do their whole duty in helping to break the last.

The Alumni Association Movement in the A. M. A.

It is already announced that at the Chicago meeting of the A. M. A. an effort will be made to establish headquarters for the convenience in gathering together the graduates of various medical colleges represented among the membership of the A. M. A.

Broadly stated, some central place will be announced where each alumnus may hope to find some bureau of information where he can get informaton concerning friends of old college days. Every college is invited to send representation and to locate at some part of the headquarters with such matter as may give desirable and desired informaton.

The scheme is a good one and ought to be far reaching. Its first and salient point of benefit is the stimulation of a wider attendance at the meeting, for nothing serves as bond of union more than old friendships. The second point is that such gatherings are bound to provoke a healthy desire on the part of each college to have a large representation. If this is organized it means not only a wider interest in the work of the Association itself, but, as a natural consequence, the constantly increasing desire and effort to have some voice in the administration of the affairs of the A. M. A.

So centralized has the present administration of the Association grown, largely through the general indifference of the bulk of the membership, that this is a serious problem in the future history of the national body. The stimulation of an academic interest by creating a factional spirit of rivalry among different colleges is bound to bring about a healthy result.

It is obvious that every college of any pretension will be glad and anxious to have its alumni participate in such a gathering; it brings the alumnus closer to his Alma Mater every time his patriotism is awakened.

The local institution has already started to advertise the Chicago gathering, through the Alumni Association of the University, and we also wish to add enthusiastically to their effort. The Alumni meet in Chicago at the Auditorium Hotel, on June 2, this year, and all Tulane men at the meeting should remember to foregather at headquarters.

The Advance in American Medicine.

It requires such a catholic utterance as that coming from Dr. William H. Welch in his address at the centennial celebration of the College of Physicians and Surgeons of Columbia University

last year to persuade the profession in this country that some glory has attached to American medicine during the turmoil of its existence in the last one hundred years. Among the men who have stood out for higher medicine, Dr. Welch ranks in the first class, and in the galaxy of luminants who have influenced medical thought and medical education he will always stand for that which is most progressive without the sacrifice of ideals. The *Bulletin* of the Johns Hopkins Hospital, for February, publishes his address in full, and the student of medicine will do well to read this carefully. It is not given to every man to stand in the limelight or to plan the lines of progress for the profession, but it is the pupil of the master who establishes the standard. The array of names quoted in the article in question creates no envy in the minds of us who read, but rather stimulates the individual effort to help the cause.

The representatives of the business side of medicine and the champions for commercial advance are multitudinous, and these perform a necessary function in the field of medical advance. They are needed to organize the rank and file into a cohesive union for the good of all, but it is the academic side of medicine that fulfills the skeletal purposes of the profession as an institution. But for this the trade of medicine would soon more than shadow the scientific side and the fresh candidates for laurels would employ the parchment of their diploma as an incorporative act permitting them simply to draw interest on a scholastic investment.

In a hundred years both the science and art of medicine have suffered at the hands of the commercial instinct, but the fact that both have survived and there are still such men as Welch to point with pride to the accomplishments of the profession shows that the true metal in the profession may dull and even tarnish with time, but that beneath the covering of modern tendencies the elemental quality still remains high and pure. It needs the occasional review of the work of the Nestors in medicine to attract the individual out in the wide field of work to the point of high endeavor and away from the lines of easy effort.

Medical education as expounded in the college and in the litera-

ture sometimes mistakes the purposes of progress and, in the hurry attendant upon the requirements of civilization, ideals suffer. After all, the profession of medicine since the days of Hippocrates has established its majority right to the humanitarian field, and it will require more than the passing indifference or the actual abuse on the part of the venal division of the profession to still the voice of higher instincts, or to stop what must always be the privilege and the purpose of a devoted medical profession.

Louisiana State Medical Society Notes.

In Charge of the Publication Committee,
Dr. P. L. Thibaut, Chairman; Drs. Homer Dupuy and Carroll W. Allen.

PRELIMINARY PROGRAM.

(A complete program will be published in the May issue of the JOURNAL.)

Section on General Medicine.—Chairman: Dr. J. B. Elliott, Jr., New Orleans. Subject: "Symposium on Nephritis."

Discussion to be opened by:

Dr. J. T. Halsey: "Physiology and Pharmacology of Nephritis."

Dr. Joseph D. Weis: "Pathology and Diagnosis of Nephritis."

Dr. E. D. Fenner: "Arterio-sclerosis and Nephritis."

Dr. J. B. Elliott, Jr.: "Treatment of Nephritis."

Section on Diseases of Children.—Chairman: Dr. R. H. Blackman, Monroe. Subject: "Symposium on Acute Nephritis in Children."

Discussion to be opened by:

Drs. R. H. Blackman and C. P. Gray: "Etiology."

Drs. S. L. White and G. M. Snelling: "Diagnosis."

Drs. C. W. Benson and O. M. Patterson: "Treatment."

Section on Bacteriology.—Chairman: Dr. C. C. Bass, New Orleans. Subject: "Bacteriological Diagnosis."

"The Bacteriological Diagnosis of Diphtheria," by Dr. John J. Archinard.

"Simple Microscopic Typhoid Agglutination Test," by Dr. C. C. Bass.

"The Spirocheta Pallida," by Dr. J. D. Weis; "The Gonococcus," by Dr. Joseph Hume.

Section on Sanitary Science and Quarantine.—Chairman: Dr. C. H. Irion, New Orleans.

Section on Maritime and Inland Sanitation.—Chairman: Dr. G. W. Gaines, Tallulah.

Section on Neurology.—Chairman: Dr. E. M. Hummel, New Orleans. Subject: "The Symptoms and Pathology of Multiple Sclerosis."

Section on Otology.—Chairman: Dr. R. F. Harrel, Alexandria. Subject: "Acute Inflammatory Affections of the External Ear, with Special Reference to their Differential Diagnosis from Middle Ear Affections, and Treatment."

Section on Ophthalmology.—Chairman: Dr. J. A. Caruthers, Baton Rouge. Subject: "A Plea for the Examination of the Eyes of School Children."

Section on Surgery.—Chairman: Dr. J. L. Wilson, Alexandria. Subject: "The Importance of Surgical Intervention in Continued Lesions of Typhoid Fever."

Section on Anatomy and Physiology.—Chairman: Dr. J. G. Martin, Lake Charles. Subject: "The Anatomy and Physiology of the Thyroid Gland."

To open discussion: Dr. T. H. Watkins, Lake Charles, and T. R. Sartor, Oberlin.

Section on Materia Medica and Therapeutics.—Chairman: Dr. J. B. Guthrie, New Orleans.

Section on Genito-Urinary Diseases.—Chairman: Dr. F. J. Chalaron, New Orleans. Subject: "Gleet; Its Causes."

To open discussion: Dr. S. P. Delaup.

Section on Dermatology.—Chairman: Dr. I. J. Newton, Monroe.

Section on Obstetrics and Gynecology.—Chairman: Dr. C. Jeff Miller, New Orleans. Subject: "The Surgical Treatment of Puerperal Infection."

Section on X-Ray and Electro-Therapeutics.—Chairman: Dr.

S. C. Barrow, Shreveport. Subject: "Some Therapeutic Uses of the X-Ray."

Section on Medical Jurisprudence.—Chairman: Dr. H. L. Ballowe, Buras. Subject: "Shall the Average Country Practitioner Testify Before our Juries as an Expert?"

Section on Oral Surgery.—Chairman: Dr. S. A. Ayo, Bowie.

IMPORTANT NOTICE.

Chairmen who have not already done so are requested to send in their subjects for discussion and the names of the openers of discussion, AT ONCE, to the Secretary.

TITLES OF PAPERS FOR 1908 MEETING.

(Members of the Society desiring to read papers at the coming meeting are requested to send their titles to the office of the Secretary, 141 Elk Place, not later than April 10, at 12 o'clock noon. After that date, it will be too late to insert titles in the Official Program.)

"The Volkman Step Operation in Ununited Fracture of Leg and Vicious Union," by Dr. Carroll W. Allen, New Orleans.

"Hydrotherapy and Its Uses by the Family Practitioner," by Dr. Louis G. Le Beuf, New Orleans.

"Diagnosis and Treatment of Intussusception, with a Report of Two Cases," by Dr. C. J. Gremillion, Alexandria.

"An Unusual Case of the Infection of the Genito-Urinary Tract Apparently not Amenable to Vaccine Treatment," by Drs. Carroll W. Allen and C. C. Bass, New Orleans.

"Gonorrheal Rheumatism," by Dr. W. E. Parker, Hot Springs, Ark.

"Reasons Why Louisiana Should Have a Sanitarium for the Care of the Poor Consumptive," by Dr. L. Lazaro, Washington.

"Carcinoma of the Tibia," by Dr. J. B. Hargrove, Natchitoches.

"Antidiphtheritic Serum Medication in Post-Operative Diphtheritic Paralyses," by Dr. Homer Dupuy, New Orleans.

COMMITTEE ON ARRANGEMENT.

Dr. C. J. Gremillion, Chairman of the Committee on Arrangement for the 1908 Meeting, has appointed the following Chairmen of sub-committees:

Finance—Dr. J. L. Wilson.

Railroad and Transportation—Dr. G. M. G. Stafford.

Advertisements—Dr. F. V. Gremillion.

Halls and Exhibits—Dr. J. A. White.

Banquet—Dr. R. O. Simmons.

Badges—Dr. R. F. Harrell.

Registration—Dr. A. H. Chopin.

IMPORTANT NOTICE TO PARISH SECRETARIES.

The attention of Secretary-Treasurers of Parish Societies is earnestly called to the provisions of the By-Laws of the State Society that dues for the current year must be in the hands of the Treasurer THIRTY DAYS PRIOR TO THE MEETING.

The Annual Session this year begins May 12. All dues should be sent not later than April 12. If Parish Treasurers will live up to this requirement, it will greatly facilitate the work of the State Treasurer's Office.

WESTERN CATAHOULA ORGANIZED.—At the last Annual Session of the Louisiana State Medical Society, a resolution was passed giving permission to the physicians residing in the western part of Catahoula Parish to organize into a separate Society, as they claimed that the distance was too great for them to affiliate with the physicians residing in the eastern part of the Parish. At a meeting of the physicians of Western Catahoula, held at Trout, March 4, 1908, the Western Catahoula Parish Medical Society was organized, with the following officers: President, Dr. B. S. Thompson; Vice-President, Dr. W. F. Wade; Secretary, Dr. T. M. Butler; Treasurer, Dr. E. R. Harrington. The next meeting of the Society will be held at Jones, La., April 1, at 12:30 p. m.

THE DESOTO PARISH MEDICAL SOCIETY met in regular session on March 2, 1908, at Mansfield, La., at the courthouse, with the following members present: Drs. Cheek, of Pelican; J. D. and J. C. Calhoun, Parsons, Nabors and Davies, of Mansfield; Bannerman, of Grand Cane.

The minutes of the preceding meeting were read and adopted. Drs. W. H. Marsh, of Pelican, and J. R. Rushing, of Benson, were elected to membership. Dr. Davies was authorized to express

thanks to the Bi-Parish Medical Society of Red River and Natchitoches for their cordial invitation to unite with them and form a Tri-Parish Society, and to regret that the inaccessibility of Coushatta and Natchitoches compelled the Society to respectfully decline, as it would take two days to attend their meetings at above places.

The subject of illegal practitioners was introduced for discussion by Dr. Nabors with the following result: "Resolved by Dr. Nabors, and seconded by Dr. Bannerman, That the Society take such steps as might be necessary to institute legal proceedings and prosecute the same against illegal practitioners of medicine in DeSoto Parish, Louisiana, and the members hereby tax themselves with an amount sufficient to secure court costs, attorneys' fees, etc., incurred by reason of said suits filed and prosecuted."

"Resolved, further, That a committee composed of Drs. Nabors, Davies and Cheek be appointed, authorized and empowered to carry into effect the above resolution."

All doctors are requested to report to said committee all and any illegal practitioners of medicine at present so engaged. Whereupon Dr. Nabors reported Fred W. Tait, of Dolette, Dr. Cheek reported James Powell, of Butler, La.

Drs. M. O. Stribling, of Cook, and N. P. Reeves, of Longstreet, were elected to honorary membership. Dr. Parsons and others gave informal talks on ulcers of the stomach, duodenum and rectum.

By order of the Society, three essays were to be read and published for the benefit of the laity, that they may be better enabled to protect themselves from the ravages of disease and entertain a more enlightened appreciation of the professional aid given them by doctors.

In compliance with the above, these appointments were made: Dr. Bannerman, "*Typhoid Fever*," (June meeting); Dr. Cheek, "*Tuberculosis*," (October meeting); Drs. J. D. and J. C. Calhoun, "*Smallpox*," (December meeting). The Secretary of the Society is to offer these papers to THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL for publication.

Dr. Davies was announced as essayist for the first Monday in June; subject: "*Puerperal Infection and Puerperal Eclampsia.*"

The meeting then adjourned to the first Monday in June.

(Signed.) E. DAVIES, M. D., Secretary-Treasurer.

Medical News Items.

THE TULANE UNIVERSITY OF LOUISIANA celebrated Founder's Day on March 13, 1908. A considerable gathering assembled at the Tulane Theater on this occasion. The address was delivered by Prof. James H. Dillard, recently retired as Dean of the Academic Department of Tulane, and now President of the Jeanes Fund. Prof. Dillard ably entertained the requirements of the trained man and referred to the opportunities offered in a college education, especially referring to this as a preparation for any field of industrial or professional occupation. Mr. Jno. A. Fox, of the Law Class of 1892, dwelt on the Southern college graduate, and especially urged the future Tulane graduate to seek the fields of advancement offered in the mineral and industrial development in the South. Dr. Craighead, the President of the University, reviewed the advance of the institution, and especially dwelt on the donations from distinguished women in Louisiana. An appeal was made to the wealthy men of the community to further the interests of the academic department, and of the law department, so as to make these commensurate in importance and endowment with the other divisions of the University.

Tulane Commencement is announced for May 20, and this year will see the delivery of diplomas to the graduates of all the departments at a joint commencement.

PHILADELPHIA MEDICAL SCHOOLS AND THE UNITED STATES PHARMACOPEIA.—An initiative has been taken by the different medical schools of Philadelphia in stimulating an interest in the teaching of the Pharmacopeia. At a meeting held in February, a representative group of Philadelphia teachers adopted a set of resolutions embodying the sentiment that it was of the utmost importance for accuracy in prescribing and in the treatment of dis-

ease that students of medicine be instructed fully as to those portions of the Pharmacopeia which are of value to the practitioner; that members of the medical profession be urged to prescribe the preparations of the Pharmacopeia, and that medical and pharmaceutical journals, as well as teachers of medicine and therapeutics, be advised of the resolution. The action of these gentlemen was brought about by the consensus of opinion that medical schools throughout the country were neglectful or indifferent of the Pharmacopeia; that if teachers in schools were stimulated to give lectures on the Pharmacopeia and National Formulary preparations this might tend greatly to discount the abuses in proprietary medicines.

WOMEN DOCTORS AT THE A. M. A.—The Women Alumnae Committee, The Women's Medical Society, of the State of Illinois, and the Medical Women's Club, each wish to entertain the women physicians visiting Chicago at the Meeting of the American Medical Association next June.

As the session of the American Medical Association is so short and the time so entirely filled, these three organizations have combined efforts, and hereby extend to all the women physicians who will be in Chicago at that time, a most cordial invitation to a banquet and entertainment to be given on June 2d, which is the evening that has been reserved for the special entertainment of the visiting Alumnae.

At this banquet a special feature will be made of the reunions of the alumnae of the different colleges. The College Club, in the Fine Arts Building, 203 Michigan avenue, will be exclusively at the disposal of the medical women during the meeting of the A. M. A., and will afford a place for all to meet, lunch, and visit together.

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS has offered prizes in varying amounts for work in tuberculosis. A prize of \$1,000 for the best evidence of effective work in the prevention or relief of tuberculosis by any voluntary Association since the last Congress, in 1905; two gold medals and three silver medals will also be awarded.

One thousand dollars is offered for the best exhibit of an exist-

ing sanitarium for curable cases of tuberculosis among the working classes, two gold medals and three silver medals will also be awarded.

One thousand dollars is offered for the best exhibit of a furnished house for a family or group of families for the working class, devised against tuberculosis; two gold medals and three silver medals will also be awarded.

One thousand dollars is offered for the best exhibit of a dispensary or kindred institution for the treatment of tuberculosis poor; gold and silver medals likewise will be awarded.

One thousand dollars is offered for the best exhibit of a hospital for the treatment of advanced pulmonary tuberculosis; gold and silver medals also.

One hundred dollars each is offered for the best educational leaflet on tuberculosis submitted by (a) adults generally; (b) teachers; (c) mothers; (d) indoor workers; (e) dairy farmers; (f) school children; (g) pictorial booklet for school children in primary grades and for the nursery.

Besides these prizes, gold and silver medals are offered for various work in tuberculosis, the details of which, as well as of the above, may be had through the Central Committee of the International Congress, which consists of the following individuals: Dr. Charles J. Hatfield, Philadelphia, Chairman; Dr. Thomas G. Ashton, Philadelphia, Secretary; Dr. Edward R. Baldwin, Saranac Lake; Dr. Sherman G. Bonney, Denver; Dr. John L. Dawson, Charleston, S. C.; Dr. H. B. Favill, Chicago; Dr. John B. Hawes, Boston; Dr. H. D. Holton, Brattleboro; Dr. E. C. Levy, Richmond, Va.; Dr. Charles L. Minor, Asheville, N. C.; Dr. Estes Nichols, Augusta, Me.; Dr. M. J. Rosenau, Washington; Dr. J. Madison Taylor, Philadelphia; Dr. Wm. S. Thayer, Baltimore, and Dr. Louis M. Warfield, St. Louis.

PAN AMERICAN MEDICAL CONGRESS.—Elaborate preparations are being made by the Government of Guatemala for the meeting of the Congress which is to take place August 5, 6, 7, 8, 9 and 10, 1908. The notice of the meeting carries attractive promises of pleasant climatic conditions at that season, which would additionally attract a visitor from the United States. As the rates over

steamship lines to Guatemala will be much reduced, and as travel in the Republic itself will be practically complimentary, it is desirable that as large an attendance as possible should be gathered from the Northern part of the Western Continent. Further announcement will be made as the organization of the meeting advances.

THE AMERICAN GASTRO-ENTEROLOGICAL ASSOCIATION MEETING will be held in Chicago, June 1 and 2, 1908. An interesting program has been announced.

ST. PATRICK'S SANITARIUM at Lake Charles was formally opened on March 17, under the auspices of the Sisters of the Incarnate Word, of Galveston, Texas. The building was dedicated by the Right Reverend C. Van de Ven, Bishop of Natchitoches. The occasion was marked with an attendance of a number of medical men from different parts of the State. Dr. J. G. Martin, President of the Calcasieu Parish Medical Society, delivered the medical address. The professional side of the institution was inaugurated subsequently and among those present from New Orleans participating in the surgical demonstrations was Dr. C. Jeff Miller.

THE CHAILLE JUBILEE.—The Alumni Association of Tulane University have undertaken the worthy purpose of celebrating the long service of Prof. Stanford E. Chaillé by appropriate exercises on May 19, the day before the Commencement Exercises of the University and of the Medical Department. The exercises are to include addresses by prominent speakers identified with national sanitary movements and others prominent in medical education.

A Chaillé Memorial Fund will be inaugurated at this gathering for the purpose of establishing a Chair of Physiology or Hygiene in the Medical Department of Tulane.

All interested are requested to communicate with the Chairman of the Organization Committee (Dr. A. L. Metz, at the Medical Department, Canal and Villere streets), or the Secretary (Dr. Isadore Dyer, P. O. Box 778, New Orleans).

STATE PHARMACY BOARD, MISSISSIPPI.—Gov. Noel has appointed the following members to constitute the new State Board of Pharmaceutical Examiners: H. B. Welborn, Columbia; J. R.

Bryan, Amory; O. Easterling, Scooba; J. B. Small, Winona; L. H. Wilkinson, Jr., Indianola. None of the members of the former Board were retained. The new appointees are all well-known pharmacists, and it is generally conceded that the Governor has made admirable selections.

DR. S. E. CHAILLE HONORED.—On March 20, 1908, Professor Stanford E. Chaillé completed a half century in the service of the Medical Department of Tulane University. As a reward for his long and efficient service as a practitioner, educator and lecturer, and as an administrative officer as Dean of the Medical College of Tulane, the Carnegie Foundation for the Advancement of Teaching has voted the venerable doctor a retiring allowance of \$3,000 a year. Dr. Chaillé is a graduate of both Harvard and Tulane University, and also studied physiology under the famous Claude Bernard; he has been prominent in general affairs of the city all his life, and his public lectures on hygiene and to the students have brought him prominently before the whole South as a lecturer and educator. **THE JOURNAL** joins in the hearty congratulations of the medical profession and laymen.

PERSONALS.—The Chair of Physiology of the Medical Department of the Tulane University of Louisiana, has been filled by Dr. Gustav Mann, who is now Assistant Professor of Physiology at Oxford University. Dr. Mann comes highly endorsed by the physiologists of this and other countries.

Dr. S. H. McLean, Secretary of the Mississippi State Board of Health, is doing some good work in public health matters.

The residence of Dr. C. H. Lawrence, at Ruston, La., was totally destroyed by fire on February 24. As Dr. Lawrence carried a fairly good insurance on the property, the loss will be in some ways compensated.

Among the doctors from New Orleans receiving Board of Health appointments are Dr. Ames, going to Port Cortez; Dr. Wailes, to Port Barrios, and Dr. Layton, to Bluefields. Dr. A. G. Maylie will be on duty at Castries, Santa Lucia Island.

Dr. E. M. Hummel, of New Orleans, has recently been appointed Consulting Neurologist to the New Orleans House of Detention. This is in line with recent persistent efforts of the State Board of

Charities and Corrections to improve conditions where the city's indigent insane are concerned.

Dr. W. G. McCallum, of Johns Hopkins, Baltimore, was in New Orleans in the early part of March, the guest of the Medical Department of Tulane. Dr. McCallum was the recipient of many attentions during his stay.

CLIPPINGS.—The Louisiana State Medical and Dental and Pharmaceutical Association (colored) met March 4, 5 and 6 in this city, at the Flint Medical College.

Archives of Diagnosis is a new quarterly journal, with Dr. Heinrich Stern, of New York City, as editor.

The Board of Directors of the New Orleans Dispensary for Women and Children invited the JOURNAL to the opening of the New Dispensary and Hospital Building on the 14 of March. The reception was a very pleasant affair and was well attended.

The Editorial Staff of the *Journal-Record of Medicine*, of Atlanta, Georgia, now entering its 53d year, has been reorganized and now includes Edgar G. Ballenger, M. D., Editor.

Albuquerque, New Mexico, has been selected as the site for a great hospital for the treatment of consumption, to be built by the general organization of the Presbyterian Church of the United States at a cost of \$1,000,000.

The County Medical Society met at Newton, Miss., on March 11, and had a good attendance. Several interesting papers were read.

Lafayette and Nachitoches are among the towns in Louisiana taking early and efficient action in regard to health matters.

Among the visiting physicians in New Orleans the past month were Dr. W. A. Deekens, of Mexico City.

REMOVALS.—Dr. A. Leigh has moved from Lecompte to Woodworth, La. Dr. T. H. Madden, from Antioch to Arcadia, and Dr. W. W. Catching has moved from Jackson, Miss., to Georgetown.

MARRIED.—Dr. Henry Eugene Gautreaux, of Covington, to Miss Hazel Seawell, of this city, on February 12, 1908.

Dr. Thomas Buxton Layton was married to Miss Rosina Bein Richardson, on February 29, 1908.

DIED.—Dr. Alexander Theriot died at Lockport, La., February 19, 1908.

Dr. John M. Gillespie, of Tensas Parish, La., died February 21, 1908, at his home, "Winter Quarters," near St. Joseph.

Dr. A. S. Gates, one of Franklin's prominent physicians, died on March 19, 1908, at the age of 65. The doctor leaves three sons who are now practicing physicians of Franklin, Tangipahoa and Covington, respectively.

OBITUARY.—Dr. Absalom Pettit died at the age of 68 on March 16, 1908, and was laid away under the auspices of the Methodist Church and with Masonic rights. The funeral was attended by many representative medical men who share with the profession generally the supreme sense of loss which the demise of this eminent member has impressed, not only upon the field of his efforts, but upon the community as well.

The deceased has always stood among the foremost in medical organization, humanitarian practice, in patriotism and in citizenship. His life was a consistent expression of the high ideals to which the follower of Hippocrates and Aesculapius may pretend. He was one of the organizers of the New Orleans Medical and Surgical Association, which was amalgamated with the present Orleans Parish Medical Society. He was at all times identified with efforts for the betterment of public health, and in each yellow fever visitation during his life of practice he was prominent on the medical side of protective efforts.

Dr. Pettit was born in Warren County, Mississippi, in 1840. He received his early education at the Military Institute in Tennessee, and graduated from the University of Nashville. His medical degree was obtained from the University of Louisiana in 1870, and since that time his practice has been in New Orleans.

He leaves behind him the memory, among patients and friends alike, of a life which was above all things modest, true, sincere and faithful to the calling which he followed.

The JOURNAL extends to his bereaved family its earnest condolence.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

Treatise on Diseases of the Skin. By HENRY W. STELWAGON, M. D., Ph. D. 5th Edition, Thoroughly Revised. W. B. Saunders & Co., Philadelphia and London, 1907.

Since the first edition of this valuable work on Skin Diseases we have consistently expressed the opinion that this work must stand as representative of American Dermatology. The present edition has lost none of the merits of those which have preceded it, and it has the additional value of having been brought down to date. The work fulfils every purpose as a text and stands as a qualified reference work on the branch it covers.

DYER.

Introduction to Infectious and Parasitic Diseases. By MILLARD LANGFELD, A. B., M. D. (John Hopkins). P. Blakiston's Son and Co., Philadelphia, 1907.

This little hand-book presents a clear description of the causation and particular organisms of infectious and contagious diseases. As a summary of present thought it is excellent and as a guide to a more extensive study it fulfils a particular purpose.

DYER.

The Every Day Diseases of Children and Their Rational Treatment. By GEORGE H. CHANDLER, M. D. The Clinic Publishing Co., Chicago, 1907.

I have never read a book on diseases of children which more practically presents the subject for the every day use of the practitioner of medicine. The author very properly states that "The little book is not intended for the pediatricist," but there are many practical points in the adaptation of pediatrics which many texts on children's diseases might incorporate. Not only is each subject well described from the point of etiology and symptoms but the treatment is made so plain that there can be no misunderstanding of the methods suggested. It is the best book on the applied therapy in diseases of children that the reviewer has yet met and for this alone it should commend itself to every man interested in the treatment of diseases of children.

DYER.

Cosmetic Surgery; The Correction of Featural Imperfections. By CHARLES C. MILLER, M. D. Published by the Author, Chicago.

While the subject matter treated in this little brochure is limited, it still is a valuable and interesting contribution to a subject which finds ordinarily an inconspicuous place in the works on surgery. Imperfections of the ear, nose, mouth and face are described and numerous excellent illustrations elucidate the text.

DYER.

Lea's Series of Pocket Text-Books. Disease of Children. By GEORGE M. TUTTLE, M. D. Lea Bros. & Co., Philadelphia and New York.

This text on Diseases of Children systematically presents the groups of childhood diseases as related to the different organs and according to methods usually adopted in works for students. It fulfils its purpose as a text and especially so, as no pretense is made to opinionative discussion, the matter presented being clear and succinct. The work is small enough to be convenient and yet comprehensive enough to cover the ground.

DYER.

Light and X-Ray Treatment of Skin Diseases. By MALCOM MORRIS, F. R. C. S., (Ed.) and S. ERNEST DORE, M. D., (Cantab.) W. T. Keener & Co., Chicago.

While many texts have discussed the various technique and field for radio-therapy the present little pocket volume explicitly presents the subject in an interesting way. The apparatus is described carefully and the application of light treatment in its various forms in particular diseases is related. An excellent bibliography is appended, which adds value to the book.

DYER.

A Text Book of Minor Surgery. By EDWIN MILTON FOOTE, D. M., M. D. D. Appleton Co., 1908.

The author's purpose, which is declared to be the consideration of the problems of minor surgery more fully than is customary in the usual surgical text-books, at once attracts the attention of those of us who have searched in vain for definite instruction about the smaller but very important details of the everyday surgical work of the general practitioner.

The book is the best of its kind that your reviewer has seen. While it contains a great deal which properly belongs to major surgery, it is valuable for its clear-cut, brief discussions of the diagnosis, treatment and operative technique of minor problems. Among its 407 illustrations are many which illustrate little details not found in every text-book. It would be a valuable edition to the library of any medical man, and especially valuable to the medical student, and the general practitioner who does his own minor surgery.

PERKINS.

A Text-Book of Practical Gynecology for Practitioners and Students. By D. TODD GILLIAM, M. D. Second Revised Edition. Illustrated. F. A. Davis Co., Philadelphia, 1907.

In the preface to the original edition of Dr. Gilliam's book he states that it was intended to be a plain and practical text for the student and busy practitioner. Moot questions were given scant attention and effete matter had been excluded. In the present edition there has been as little alteration as possible. The changes, for the most part, have been confined to technics, as there have been few changes along other lines, such as would be taken cognizance of in a work of this scope and character. A number of new half-tone plates have been added to the illustrations, besides some cuts which have been substituted for others less desirable.

MILLER.

Publications Received.

P. BLAKISTON'S SON & CO., Philadelphia, 1908.

Lectures on Medical Jurisprudence and Toxicology as Delivered at the London Hospital, by Fred J. Smith, A. M., M. D.

Studies in Laboratory Work, by C. W. Daniels, M. B., and A. T. Stanton, M. D. 2nd Edition.

Diseases of the Breast With Special Reference to Cancer, by William L. Rodman, M. D., LL. D.

F. A. DAVIS, CO., Philadelphia.

Personal Hygiene In Tropical and Semi Tropical Countries, by Isaac Williams Brewer.

D. APPLETON & CO., New York and London, 1908.

Syphilis, by Edward L. Keyes, Jr., A. B., M. D., Ph. D.

LEA & FEBIGER, Philadelphia and New York, 1908.

Progressive Medicine. Hare-Landis. Vol. X., No. i. March 1, 1908.

J. P. LIPPINCOTT CO., Philadelphia and London.

Treatment of Internal Diseases for Physicians and Students. Dr. Norbert Ortner. Edited by Nathaniel Bodwitch Potter, M. D. (Translated by Frederic H. Bartlett, M. D.)

MISCELLANEOUS.

Thirtieth Annual Report of the Department of Public Health, Augusta, Ga.

U. S. Department of Agriculture and bureau of Plant Industry, Bulletin No. 121, Part I. "The Supposed Relationship of White Snakeroot to Milk-Sickness, or 'Trembles'", by Albert C. Crawford. Part III. "Results of Loco-Weed Investigations In the Field," by C. Dwight Marss, and Laboratory Work on Loco-Weed Investigations, by Albert C. Crawford. (Government Printing Office, Washington, D. C., 1908.)

The Mellin's Food Method of Percentage Feeding. (Press of Mellin's Food Co., Boston, Mass., 1908.)

Seventh Annual Report of the New York State Hospital for the Care of Crippled and Deformed Children for the Year Ending Sept. 30, 1907.

Milk and Its Relation to the Public Health. (By Various Authors). Hygienic Laboratory Bulletin No. 41. (Government Printing Office, Washington, D. C.)

Annual Report of the Surgeon-General of the Public Health and Marine Hospital Service of the United States for the Fiscal Year ending 1907.

Sixth and Seventh Annual Reports of the Work of the Cancer Laboratory of the New York State Department of Health, Conducted by the Gratiwick Research Laboratory, University of Buffalo, for the Year 1904-05 and 1905-06 respectively.

Reprints.

The Duality of Man, by C. G. Savage, M. D.

The Communal Life of Physicians—Its Cultivation and Value, by Leartus Connor, A. B., M. D.

The Submucous Resection of the Nasal Septum, by Lee Maidment Hurd, M. D.

A Note on the Reducing Power of Urine Following the Administration of Urotropin; (2) *Acute Non-Suppurative Encephalitis in Children*; (3) *Urinary Infection in Children*; (4) *Hemorrhage Into the Spinal Meninges*; (5) *The Treatment of Congenital Syphilis in Infancy*, by I. A. Abt, M. D.

Nasal Catarrh, Mouth Breathing, Hay Fever and Asthma, (2) *Channels of Infection in Tuberculosis*; (3) *Deviations and Deformities of the Nasal Septum, Etc.*, by Bryan DeForest Sheedy, M. D.

MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Report of the Board of Health of the City of New Orleans
FOR FEBRUARY, 1908.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	3	1	4
Intermittent Fever (Malarial Cachexia)			
Smallpox.....			
Measles.....			
Scarlet Fever.....			
Whooping Cough.....		1	1
Diphtheria and Croup.....	2		2
Influenza.....	29	28	57
Cholera Nostras.....			
Pyemia and Septicemia	1		1
Tuberculosis.....	52	31	83
Cancer.....	16	2	18
Rheumatism and Gout		2	2
Diabetes	1		1
Alcoholism	5		5
Encephalitis and Meningitis.....	2		2
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	17	10	27
Paralysis	4	3	7
Convulsions of Infants	3	5	8
Other Diseases of Infancy	19	9	28
Tetanus.....		5	5
Other Nervous Diseases			
Heart Diseases.....	61	28	89
Bronchitis	7	7	14
Pneumonia and Broncho-Pneumonia.....	81	58	139
Other Respiratory Diseases	5	3	8
Ulcer of Stomach.....			
Other Diseases of the Stomach	3	2	5
Diarrhea, Dysentery and Enteritis.....	7	7	14
Hernia, Intestinal Obstruction.....	3	2	5
Cirrhosis of Liver.....	12	2	14
Other Diseases of the Liver	2		2
Simple Peritonitis	1		1
Appendicitis.....	1	1	2
Bright's Disease	35	31	66
Other Genito-Urinary Diseases.....	3	4	7
Puerperal Diseases	5	5	10
Senile Debility.....	27	12	39
Suicide	7		7
Injuries.....	27	11	38
All Other Causes.....	21	4	25
TOTAL.....	462	274	736

Still-born Children—White, 24; colored, 21; total, 45.

Population of City (estimated)—White, 258,000; colored, 93,000:
total, 351,000.

Death Rate per 1000 per annum for Month—White, 21.48; colored,
35.35; total, 25.16.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 30.15
Mean temperature 55.
Total precipitation 4.14 inches.
Prevailing direction of wind, southeast.

Do not Take Out
Of This Room.*Paullum seculum distat interitum
Cela virtus. — HORACE.*

New Orleans Medical and Surgical

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ESTABLISHED IN 1844.

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MAY, 1908.

NEW ORLEANS
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(Established in 1844.)

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Destroys Micro-Organisms

New Orleans Medical and Surgical Journal.

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No. 11

Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a **WRITTEN** order for the same accompany the paper.)

Operations on the Tubes and Ovaries.*

By DR. GEO. R. FOX, Moreauville, La.

In reporting this case, I feel that this condition having escaped the notice of a specialist, who believed that it was absolutely hopeless, that similar cases may exist, and wherever there is doubt, an operation would be justifiable, as there is little danger attending it. The case has certainly been remarkable from every standpoint.

This subject is of such limitless scope, it will be almost impossible to do more than give a brief resume of the various operations mentioned in our text books and to quote some recent opinions concerning the necessity for conservatism in these operations whenever possible.

The idea of extirpating diseased ovaries is accredited to Schor-kopf, in 1685. In 1772 Hunter made the suggestion that, if there are no adhesions, the punctured sac of an ovarian cystic tumor could be removed through an incision two inches long. In 1701

*Read before Avoyelles Medical Society.

Dr. R. Houston exposed an ovarian tumor by an incision five inches long, and as nothing escaped after puncture, he removed the colloidal contents in part with his hands and in part with a piece of wood shaving, and closed the abdominal wound with three sutures. The patient recovered and lived for sixteen years.

Ephraim McDowell, of Kentucky, however, was the first to perform ovariectomy according to a well-considered plan and in the full consciousness of what he was doing. It is said he received the impetus of the operation from his teacher, J. Bell, of Edinburgh, who had emphasized the uselessness of all other methods of treating diseases of the ovaries, and believed firmly in the practicability of extirpation. Ephraim McDowell performed his first ovariectomy in 1809. The patient recovered and lived thirty-one years.

He operated in twelve additional cases, with eight recoveries, and has since been considered "the father of ovariectomy."

Operations on one or both ovaries are indicated in the following conditions: 1. Ovarian tumor; 2. Ovarian cyst; 3. Papillary tumor; 4. Carcinomata; 5. Dermoid cysts; 6. Parovarian cysts (Hydatid of Morgagni); 7. Fibroid tumors; 8. Sarcomata; 9. Tuberculosis; 10. Castration, or double oophorectomy, for the relief of hysterio-epilepsy, dysmenorrhea, epilepsy, and mania.

Among conditions requiring operations on the tubes are the following: 1. Dropsy, or hydro-salpinx; 2. Pus tubes, or pyo-salpinx; 3. Occluded tubes; 4. Tubal pregnancy; 5. Tuberculosis; 6. All conditions where the tube and ovary are both involved and cannot be operated on separately.

Nearly all gynecologists at present agree that nearly all operations on the tubes and ovaries recommended and practiced until quite recently have been entirely too radical. Howard A. Kelly, in his recent work on operative gynecology (1898), Vol. 2, Chap. XXV., devoted exclusively to "conservative operations on the tubes and ovaries," says: "Gynecological conservatism has come to have a newer meaning within the past ten years, and it is now the distinctive attitude of the newer and better surgery, as contrasted with the widely prevailing radical methods of the last decade."

Conservatism is the effort to spare as much as possible of the pelvic organs during an operation, and conscientiously avoid the

removal of any organ, or any part of an organ, that is sound, as well as organs or parts which, though not sound, are deemed capable of regeneration; or, if diseased, to avoid removing organs whose presence is not incompatible with life or fair health.

Fifteen years ago the statement that an operation was conservative, meant that, in removing a diseased ovary and tube, it was not his habit to remove also the opposite sound ovary and tube, under the assumption that the disease was liable to recur in the opposite side. Even yet the pernicious practice prevails in some places of removing ovaries for dysmenorrhea, and of removing ovaries exhibiting one or more unruptured Graafian follicles under the assumption that they are diseased.

It is only a few years since the rule prevailed widely in regard to pyosalpinx of one side that organs of the opposite side must always be removed, too.

The first telling argument in behalf of conservatism was made by Sir Spencer Wells (*Ovarian and Uterine Tumors*, London, 1882, p. 342), in his report of a thousand cases of ovariectomy, in tabular form, with a note of the after-history of each case. In an analysis of this table made by Dr. Durkee, it shows that when the ovariectomy was unilateral (that is, that one ovary was left), in 228 women who survived the operation and were under 40 years of age, of these 228 women thus left capable of bearing children, 120 did actually bear 230 children; to the women in this group who were over 40 years of age, four children were born. That is to say, there was an average of one child to every young woman with one ovary left in, and a recurrence of the disease in the remaining, necessitating operation without a death in but six women.

The comparison of the advantage and disadvantage of leaving in an apparently sound ovary is, therefore, in each case the average chance of having one child, as contrasted with the risks of a recurrence of the disease in 2.6 per cent of the cases. If the mortality of ovariectomy is 5 per cent, then the risk of death is 13 to 1 against it, even if the disease does recur.

The reasons for conservatism are: 1. That it is the general attitude of all true surgery.

2. The important uses and relation of the conserved structures to the human organism.

3. The recognition that what were once considered diseases of the tubes and ovaries are in many instances no disease at all.

4. The recognition that the disease of a part of a structure, ovary, tube, or uterus, may demand the removal only of that portion that is diseased.

5. The discovery that in certain diseases an entire regeneration may take place, and badly diseased tubes may become normal again in their functions.

6. On account of the value of the structures involved, ovary and tube are no longer removed en masse for purely technical reasons, but a diseased tube, or part of a tube, a diseased ovary, or part of an ovary, are removed by themselves, each without interfering with the other.

The author discusses each of these reasons for conservatism at some length, so that it will be quite impossible to quote them here, but since the second one herein given, viz., "Importance of conserved structures to the welfare of the patient," is so new and important, and has been so widely discussed of late, I feel assured you will be repaid for the time taken to quote the author in full.

"The pelvic organs are indelibly associated in a woman's mind with those fundamental differences between the sexes which impress upon the female organism all that is distinctive; and in her attitude towards the world at large, and with the healthy performance of her functions in the recurring monthly fluxes, ovulation, and the possibility of conception, lie, though the woman may be unconscious of it, some of the deepest wellsprings of her happiness.

"The effect of the removal of the sexual organs in woman is, in many instances, entirely analogous to the corresponding operation upon a man, disturbing her physical and psychological balance, and bringing on a state of wretched confusion in the new and anomalous relationship in which she finds herself.

"Menstruation has been denounced as a useless, troublesome function, entailing discomforts and impeding woman's progress in all competitive work, but we are now beginning to realize that so long as its cyclical changes persist, they hold most important fundamental relations to the well-being of the body at large; and while we are as yet unable to state what is definitely accom-

plished by the act in its way of excretion or its influence on metabolism, we do know that the sudden artificial induction of the menopause is often a source of extreme and lasting discomforts.

"It is still a matter for future demonstration whether or not these sequelæ are in all cases obviated by leaving in one or both ovaries when the uterus and tubes are removed and menstruation is so checked."

I might here mention that in a patient of mine, in which only the uterus was removed by Prof. Matas, the artificially induced menopause was quite severe, the symptoms lasting for more than a year. Ovulation and pregnancy under suitable conditions are, to a degree utterly unappreciable to the male mind, essential elements to a woman's happiness.

To dwell upon this point would be to reiterate what any attentive surgeon may gather from his daily experience in the consulting room and to rehearse well-known facts in the history of womankind. C. Shroder stated that one of his reasons for the preservation of part of an ovary was to preserve the function of ovulation, even if it were accompanied by but a theoretical possibility of conception.

INTERNAL SECRETION.—There is a growing conviction that the ovary belongs to the same group of organs as the thymus, thyroid and pineal glands, and that in addition to its function of ovulation it secretes a substance which is absorbed and consumed in the animal economy, and which is necessary to it in retaining its physiological balance. (See C. H. F. Routh, *Brit. Gyn. Jour.*, May, 1894.)

The argument in behalf of this substance, which we *might* call "ovarine," were it not for the illegitimate trade uses for which this term has been appropriated, does not yet rest upon the basis of an absolute demonstration, but rather upon the strong analogy which may be drawn between the ovary and the internal secretive glands named, and as evidenced by the disastrous consequences following their removal during the period of their functional activity. C. Martin says (*Brit. Gyn. Jour.*, Nov., 1893), p. 273): "It is probable that the ovaries, like the liver and the thyroid gland, modify the blood circulating through them, and add to the blood some peculiar product of their metabolism. It may

be that some of the climacteric symptoms are due to the loss of this substance from the system."

An active principle called "spermin," found in sperm by Schriner in 1872, has been found in the thyroid and thymus gland, and in the spleen, testes, ovaries, and blood, from all of which it has been extracted in the form of an insoluble spermin phosphate. A. Poehl, a German, whose researches on this subject were published in Berlin in September, 1893, has elaborately studied this product, and found it both in the male and female reproductive organs, as a normal physiological constituent of the prostate, ovaries, thyroid, thymus, pancreas and spleen, as well as in the blood. The crystals of the spermin were separated from the semen in a form similar to the Charcot-Leyden crystals of Boettcher, with which they were for a long time confused. Spermin is, as A. Gauthier has declared, a leukomain, believed until recently to be a product of retrograde metamorphosis of an albumen, either injurious or indifferent to the organism; evidences now in hand, however, go to show that spermin possesses most valuable functions in connection with the activities of living beings, and the spermin secreting and elaborating organs may be called the "apothecaries" of the body, secreting many important medicaments, much more active and more accurately representing its true wants under varying conditions than any artificially administered drugs. Spermin is an active oxidizing agent, assisting by its catalytic action in restoring the oxidizing power of the blood without having recourse to the oxygen derived from the air; this action is remarkably illustrated by the introduction of a small quantity of spermin with metallic magnesium into a watery solution of the chlorides of the noble metals, and some others (Au Cl_2 Cu Cl_2), when the metal is converted into magnesium oxide, the needed oxygen being taken from the water. Spermin has shown a favorable action when given to a patient suffering from diabetes, scurvy, etc., in which auto-intoxications are manifestly the result of an accumulation of retrograde products; injected subcutaneously, it acts as a physiological tonic in all kinds of depressed conditions, such as neurasthenia, anemia, etc. Poehl declares that it increases the nitrogenous excreta of the kidneys. Its action is enhanced by the alkaline condition of

the blood. More positive evidences for an internal secretion of the ovary are furnished by the experiments upon bitches made by C. A. Curatulo and L. Tarulli ("*La Secrezione Intern dell Ovari*," Rome, 1896). These authors, after regulating the diet of the animals until a certain average quantity of nitrogenous materials and phosphates ($P_2 O_5$) in the urine greatly and permanently reduced in quantity. In one case where the nitrogenous materials averaged 9.93 grams, and the phosphates 1.5 grams, a series of daily observations was continued over three months, and demonstrated the fact that, while the nitrogen remained about the same in quantity, the phosphate decreased down to 0.6 grams. These experiments also explain the utility of castration for the relief of osteomalacia in permanently diminishing to such a marked degree the excretion of the lime salts which go to form the solid elements of the bones. Associating Curatulo's results with the evidence given by Poehl of the high oxidizing power of "spermin," we may attribute the effects of castration in decreasing the phosphates in the urine, not to the lessened quantity taken in the food, but to a diminished oxidation of the organic phosphates contained in the tissues, which, combined with the earthy bases, are finally deposited in the bones in the form of calcium and magnesium phosphates.

Routh gives further important evidence of the existence of an internal ovarian secretion in citing Dr. Airistoff's investigations, which show that when one ovary is removed in a rabbit, the other undergoes a compensatory hypertrophy, increasing in both size and weight, the follicles mature and wither more quickly, and the medullary portion increases. These changes begin within two months after the operation, and in three or four months the remaining ovary has become nearly double its original size. Since the effects of castration in women, whether the structures are diseased or not, are so often disastrous, it becomes a question of paramount importance to determine whether we can in any way substitute the lost ovarian tissue, and to this end two natural lines of experiment have been tried. E. Knauer (1896) has shown that the ovaries may be completely severed from their normal surroundings and successfully transplanted either to a part of the broad ligament or between the muscles of the abdominal wall.

In one of the rabbits experimented upon and examined six months after the transplantation, one ovary excised and transplanted in the broad ligament was found as big as a lentil and abundantly nourished, with a normal stroma and numerous follicles of all sizes, containing ovules. A number of degenerated follicles was also found, perhaps more than usual. An ovary implanted in the fascia of the abdominal wall was only about a third of its original size, but was in other respects normal.

The important conclusion may, therefore, be drawn that the ovaries may be transplanted even to a distant point, differing widely from their normal habitat, where they will not only grow, but will also continue to develop normal Graafian follicles. It still remains to be shown whether these follicles rupture, and of what use transplanted ovaries may be to the animal economy.

The second line of experimental substitution of the lost ovarian tissue is that of feeding to the women deprived of their ovaries one of the various organic juices.

This has been tried by R. Crobak (1896) in a few cases without distinctly encouraging results. The ovaries of cows, washed in ether and alcohol and dried in a temperature of 45 to 50 C. with an air pump, and then pulverized and made into tablets containing 0.2 gram of ovarian substance each, were used. Two, three, or even four, of these tablets were given daily to women suffering from the severe symptoms of an induced climacteric; in one case, after taking two or three tablets daily, the attacks of giddiness, flushes and sweatings which the patient had been having on an average of ten times daily, were reduced to three and disappeared entirely at night; another patient was entirely relieved of attacks which had been distressing her five or six times a day; in another case, with frequent attacks, as many as twenty a day, they were reduced one-half. If the ovary and thyroid gland both secrete a similar principle, spermin, or if the ovary secrete a principle which is then elaborated for use by the thyroid gland, it is manifest that good results might be expected by the administration of the thyroid gland or of the thyroid extract, for it shows such remarkable powers of retaining its identity, even in the presence of mineral acids, that it might well be expected to withstand also the chemistry of digestion. A valuable contribution to

this line of observation has been made by Dr. H. B. Stedman, of Chicago (*Amer. Jour. Gyn. & Obs.*, Feb., 1897), who gave thyroid tablets to a series of patients suffering from various forms of mental and other disturbances, such as excessive flow, amenorrhea, extreme nervousness and ovarian pains. All of which might, under the present hypothesis of the function of the internal secretions, be attributed to deficient ovarian secretion. Each tablet, given three times daily, represented about one-sixth of a sheep's thyroid. In each of the six cases such a remarkable improvement was observed within several weeks that the conclusion seems to be well founded that "in those cases of neurasthenia with poor nutrition, and in consequence disordered pelvic function, ovarian tissue is indicated. The extract not only modifies the nutrition of the ovary, but also general nutrition, and this return to the normal makes physiologic processes possible."

There exists probably "an intimate nutritive relation between the pelvic generative organs and the thyroid; and the ovary shares, too, in some mysterious manner, in the process of general metabolism."

In a paper read in the section on Obstetrics and Diseases of Women of the A. M. A. at the 57th Annual Session, June, 1906, by John E. Cannaday, of Hansford, Va., on "The Present Status of Conservatism in the Surgical Treatment of Tubes and Ovaries," he says: "We all know that even the least of the atoms has its definite value and its purpose to fulfill the harmonious whole of Nature's plan. We have been long taught, when a limb was injured, a hand mangled or an abscess formed, to make every effort to save the part. Until recent years, these saving methods did not seem to apply to the pelvic organs of women at all."

SURGICAL TREATMENT OF OVARIES.—In view of the fact that pelvic lesions constitute a large per cent of every surgeon's cases, their treatment becomes a matter of momentous importance. The recognition of the value of the internal secretions of trophic influences of the ovaries has a world-wide influence as regards the surgical treatment of these organs. The elder Emmet expressed the hope that future generations might go uncastrated. More than twenty years ago Schroeder first advocated the preservation of the remnant of ovarian tissue that could be left in the removal

of cysts. About that time August Martin reported a number of cases in which he had removed degenerated portions of the tube and ovary and saved the normal tissues. "A few years later Wm. M. Polk presented to the surgical profession his brilliant results, and then considerable attention was paid to the subject in this country." Von Winkel, Hofmeir, Schatz, Swifel, P. Muller and A. Palmer Dudley were all pioneers in this work. "Considerable harm has at times been done by over-enthusiastic followers of these men, the student often lacking the judgment of the teacher. Lawson Tait was a most distinguished exponent of scientific 'hari-kari'. At present, were he living, he would no doubt be unpopular with most French statesmen and with our own President Roosevelt."

Batley in America, Tait in England, and Hegar in Germany, set the pace for the wholesale removal of ovaries in three of the world's greatest countries.

In an address before the A. M. A. the late A. Palmer Dudley said: "A quarter of a century ago he who would have advocated conservative surgery on the uterine appendages of woman would have been considered by the surgical profession at large as a fit subject for the asylum.

"A review of gynecological events occurring during these last twenty-five years present a wonderful panorama of wide sweep. We have had many stars in this often tragic drama of surgical arena. Many of the makers of gynecology could see no avenue to success but that made by the removal of all that lay in their path. It is unusual for the genital organs of the male to be sacrificed for any condition save malignant disease. In inflammatory disease of the testicle or vas deferens, removal as a rule is the last thing thought of." The repressed sex are entitled to some privileges as well. It is distinctly of no advantage to the woman to exchange one undesirable condition for another. The belief in the mind of the woman that she has lost the generative function, that she has lost some of the finer sensibilities of the sex, that she is unlike other women, is in itself to most women productive of much mental anguish.

VIEWS OF A NUMBER OF AMERICAN GYNECOLOGISTS ON THIS SUBJECT.—Drs. Coe, Williams, Ashton, Manton, Stone, Jewett, Morris, Brothers, Polk (Ill.) and McRae slit open occluded tubes,

do plastic work, and otherwise attempt to restore in a measure normal physiologic conditions. Deaver practices the above methods in a very limited number of cases. Carstens is extremely conservative in dealing with cases under 35 years of age, very radical with those above that age. Boldt rarely resorts to conservative work on the tube. Vandever nearly always does radical work. Brettauer does radical work, except in a few cases of hydrosalpinx. Gordon nearly always does radical work. Ernest favors conservative operations occasionally. Kelly, under rare conditions, when the patient is very desirous of having children, resorts to plastic surgery, and Robins only does this sort of work when called to operate in cases of sterility.

But few claim any experience in ovarian transplantation.

Boldt and Brothers occasionally transplant the ovary to the uterine cornu after removal of an impermeable tube. Morris has had an extended and interesting experience, both experimental and clinical, in this sort of work. By his experiments on rabbits he has shown that after transplantation the host of the borrowed ovary may become pregnant; that the tissues of one animal are not kindly disposed to those of another; that the transplanted ovary in heteroplastic grafting degenerates in a few weeks or months. He has in several cases succeeded in ameliorating or preventing the distressing symptoms of the artificial menopause by this means.

According to recent reports, a patient of his became pregnant and was delivered of a normal baby after her own ovaries had been removed and one from another woman substituted. The estimate of the percentage of pregnancy after conservative work on the tube and ovary are small, somewhere in the neighborhood of 1 per cent. Many operators report no cases of pregnancy whatever after plastic work on the tube. A great many pregnancies have followed conservative work on the ovaries. The percentage given by different operators vary from 5 to 10. Mark has had conception follow the leaving of minute portions of ovarian tissue. McGuire reports pregnancy following the complete removal of one tube and ovary, the removal of three-fourths of the other ovary, and the outer third of the remaining tube. Many of these men favor palliative treatment before an operation is ultimately decided on.

All, of course, are radical in removal of pus tubes.

There is considerable variance in the minds of most operators as regards what constitutes conservatism. Many do without any operation whenever possible, and when they do operate, make a clean sweep, holding THAT to be a truer conservation than an operation which carries with it the possible risk of a second resort to surgical relief.

After an exhaustive review of the subject of "conservatism vs. radical work," and a discussion of "technic plastic or repair work," this author draws the following conclusion:

"I believe that, barring the presence of the menopause, inflammation, pus, tuberculosis, and malignant disease, conservative work should be done; that every organ or part of an organ consistent with the health and well-being of the patient should remain undisturbed; that in these cases there is much room for exercise of good judgment and due discrimination; that the risk of infection and of secondary operation from portions left behind are rather remote in properly selected cases."

To summarize: A majority of gynecologists favor conservatism. The number of pregnancies occurring after tubal operations is very small; that the results after plastic work on the ovaries are better; that age, the presence of pus, tuberculosis and malignant disease indicate, as a rule, radical work; the prolapsed ovaries, generally speaking, should be elevated in the pelvis by suspension operations on the uterus, by shortening the ovarian ligament, or by placing the ovary in front and on top of the broad ligament; that the functions of the tube and ovary shall be conserved whenever consistent with health; that the artificial induction of the menopause brings a very serious disturbance into the life of the patient, and that ovarian transplantation, experimentally and clinically, has in a limited field been productive of satisfactory results.

Infantile Scurvy, with Report of Cases.*

By DR. E. D. FENNER, New Orleans, La.

I should hesitate to address you this evening upon so commonplace a subject as this if I did not know from numerous experiences in the past that scurvy in the young is often overlooked by even men of considerable experience.

*Read before Orleans Parish Medical Society, February 22, 1908.

Scurvy may be defined as a disorder of nutrition, characterized by pronounced anemia, spongy or bleeding gums, hemorrhages (subperiosteal) around the joints, from the nose and sometimes from the other mucous membranes, extreme hyperesthesia and pseudo-paralysis of the lower extremities, and due to some prolonged error of diet.

As it occurs in adults it has long been known. Indeed, in olden times it was far more common than it is today. Before the means for its prevention and cure were discovered, it committed frightful ravages amongst seamen, and in sieges, where people were cut off from fresh food. It is said that during the middle ages scurvy was responsible for more deaths amongst the beleaguered in times of war, than the missiles of the investing armies. Anson's English fleet, in 1742, lost 621 men out of 921 by scurvy, and whenever any expedition set out upon a long voyage there was sure to be an outbreak of scurvy among the crew, which was more or less general and fatal, according to the length of time which elapsed before a supply of fresh food could be obtained. With the application of the proper preventive in the famous voyage of Capt. Cook, some thirty years later than Anson's terrible experience, by means of which Cook lost only one man in a three years' voyage, the disease began to be less frequent and fatal, till in our own times it is a comparatively rare disease. But even now it is seen in those who are compelled to live entirely on salt meat and bread, and are deprived of fresh vegetable food. Thus it is not a rare visitation in Polar expeditions, and is reported to be common in the famine districts of Russia.

Common as the disease once was in adults, it was not recognized in infants till comparatively recent years. The very first case recorded as being scurvy in an infant was reported very briefly by Ingerlov, a Dane, in 1873. Chaedle of London, reported three cases in 1878, which he recognized as being scurvy. And in 1883 Barlow, an English physician, published an account of infantile scurvy, with a report of cases which was so complete that the disease is still widely known as Barlow's Disease. Barlow's contribution showed to the profession the true significance of symptoms, which had till then not been understood, and from that time we see the affection being gradually recognized in first one country and

then another. Thus Northrup reported the first case in America in 1889; Butinel in France, in 1894; Wood in Australia, in 1896; Duenas in Cuba, in 1898; while in Italy no case had been reported in the literature till 1902. Long before it had been recognized that the disease could attack children, various writers had recorded cases which we now know must have been scurvy, under such title as "Hemorrhagic Periostitis," and the like.

ETIOLOGY: The exact cause of scurvy is not known. The following are the conclusions reached by the majority of the Committee of the Collective Investigation, conducted by the American Pediatric Society:

1. The development of the disease follows in each case the prolonged employment of some diet, unsuited to the individual child, and often a change of diet, which at first thought may seem to be unsuitable, may be followed by recovery.

2. In spite of this fact regarding individual cases, the combined report of collected cases makes it probable that in those there were certain forms of diet which were particularly prone to be followed by the development of scurvy. First in point of numbers to be here mentioned, are the various proprietary foods.

3. In fine, in general, the cases reported seem to indicate that the further a food is removed in character from the natural food of a child, the more likely its use is to be followed by the development of scurvy.

This set of conclusions is a very indefinite explanation of the cause of the disease, and even to this a minority of the committee dissented, putting in a minority report in which the cause of scurvy is declared to be ptomain poisoning from the intestines. And while admitting the curative properties of fresh vegetable and fruit juices, there are still some who insist that this view of the minority is correct.

The food element needed to prevent and to cure scurvy is found in fresh vegetables, fruits and milk, and even in fresh beef-juice, and it is now believed by many to be found in the potassium salts of the vegetable acids.

Inasmuch as prolonged employment of an unsuitable diet is necessary to produce scurvy, we should not expect to meet it in the first few months, although a case has been reported in a child only

three weeks old. It is most frequently encountered in infants between 4 and 15 months of age, and the reason for this is obvious. Up to the fourth month an improper dietary has not generally had time to produce scorbutic symptoms; after 15 months the child is apt to have gotten upon a diet sufficiently varied to prevent the development of scurvy. Occasionally, however, we meet with a child who has peculiar ideas about its food, and will not touch any but a very few things. Thus Carpenter, of London, has reported a severe case of scurvy in a boy of $5\frac{1}{2}$ years, who would eat bread and sugar, and occasionally a little butter, but he objected to milk, though he could drink tea with milk in it. He ate fried or roast meat, but the meat had to be dry, and he would not touch gravy or meat juice. Vegetables he always refused; they made him sick, and he had never eaten fruit of any kind. He liked suet pudding, and took milk puddings occasionally.

I have myself, within the last two years, treated a child who presented the same peculiar distaste for any kind of fresh food, and who showed symptoms which were suspicious of scurvy, although I was not able to convince myself that this was the whole trouble. Her history is as follows:

M. S., age $21\frac{1}{2}$, second child, the other one dying of I do not know what disease. Was breast fed in infancy. She always had trouble with her digestion. Walked at 15 months. Has all her teeth. Is fat and healthy looking. Head is unusually large, but this is also the case with her father, whom she greatly resembles. The fontanelle is still open and soft. She used to sweat freely about the head. She is an unusually intelligent child. Seen by me on February 25, 1906. She was apparently perfectly well in September, 1906, when one day her legs suddenly gave way, and she commenced crying bitterly. The next day she could not walk, but in a few days she began to walk again. She appeared to be able to walk better on some days than on others, and had not much pain or tenderness, but has constantly complained of "lazy legs." There is today neither deformity, atrophy, nor tenderness, that I can detect. Reflexes are normal, but she cannot be induced to walk, wanting to be carried all the time.

Her appetite is peculiar. She dislikes milk, which always seems to disagree with her, and she will not touch fruit or vegetables.

She is very fond of meat, thoroughly cooked, which she chews but does not swallow. Eats biscuits, and will take beef-broth, but refuses almost everything else. The urine is very acid, and there is evidently a slight grade of rachitis.

I at once insisted upon an improved diet, and tried to give cream, but it disagreed. Tonics of codliver oil, with the hypophosphites and syr. iodide of iron, and later 1 drop doses of Donovan's solution were ordered. After vainly trying orange juice for two days, I found that the child not only could, but would take fresh pineapple juice. As soon as the effects of the fruit juice had time to exhibit itself, improvement was progressive. The pseudo-paralysis rapidly disappeared, but although she never had any return of these symptoms, she persistently exhibited a distaste for vegetables, a craving for overdone meat, and a recurrent tendency to attacks of biliousness. After about 18 months of education she has finally overcome her morbid tendencies towards a mixed diet, and is a perfectly healthy child today.

It may be a question whether this was a case of genuine scurvy, but I am quite sure that her pseudo-paralysis was the result of the strange diet upon which she subsisted, and have regarded it as an example of those "border line cases," of which every disease presents us with instances.

It is a mistake to suppose that scurvy is prone to attack the emaciated or the very poor. In point of fact it is rather more common amongst the well-to-do, for the reason that the danger of reckless feeding is better understood, and a rigid adherence to sterilized food is more common than in the families of the poor, whose children are apt to be given various articles from the table much sooner. It is also true that the victims of scurvy, like those who have rickets, are often fat, since they are likely to have been taking a food rich in carbohydrates, although deficient in other elements.

The real cause of scurvy is to be found in the food. In most of the cases we find that the child has been bottle-fed, and has taken either one of the proprietary foods, or cow's milk which has been completely sterilized. In the few cases, and they undoubtedly occur, where the child has been breast fed, lactation has been unduly prolonged, and an investigation will show the milk to be grossly at fault in composition.

PATHOLOGY: The most pronounced pathological features of scurvy are the anemia, and the tendency to hemorrhages under the periosteum, or from the mucous membranes. It is to be remarked, however, that in the very young, whose teeth are not yet through, the bleeding gums may be absent, although the gums may be swollen, spongy and purplish in color, and there may not be any palpable sub-periosteal hemorrhage, even though there be marked evidences of scurvy.

Associated with the symptoms due to scurvy, we frequently find the pathological change due to rickets. Both are due to prolonged error of diet, both are produced by the same class of foods, and we would expect to find, as we do, that most cases of scurvy are also cases of rickets.

SYMPTOMS: Scurvy presents itself in infancy, in the majority of cases, as a painful pseudo-paralysis of the lower limbs. Often the onset is sudden so far as the parents can tell. The child loses the use of its lower limbs; it cries bitterly on being handled. Along with these symptoms there is pronounced anemia, shown by the pallor of the face. The gums are swollen and congested, and there may be a distinct, tender swelling on one of the long bones, generally the femur. There is not much disturbance of the temperature, and the bowels may not be much disordered. The extreme sensitiveness of the child, when it is handled, is something which can never be forgotten.

This is the usual picture which, taken with a history of artificial feeding, should at once arouse our suspicion, and lead to the trial of what is at the same time the cure and the diagnostic test:—the administration of fresh fruit juice. There are, however, many variations in the symptom complex. The hemorrhagic tendency may show itself as an intra-orbital hemorrhage, or it may take the form of hematuria, nose-bleed, or hematomesis. There may be purpuric spots upon the skin, although patechiae are not so common as in adults. And it is always to be borne in mind that the classical picture of spongy, bleeding gums, pseudo-paralysis, enlargement of the lower end of the femur, and advanced anemia, with exquisite tenderness when handled, is subject to many variations, and that any of these symptoms may be absent or slight. In some cases the only signs may be sensitiveness of the limbs, with slight congestion of the gums.

The following case histories illustrate the various manifestations of the disease at the bedside or in the clinic.

E. S., 9½ months old, was seen by me on January 5, 1905. The child has been sick for seven weeks. She has lost the use of her lower limbs, and suffers great pain on being handled or touched. She has had no disturbance of her bowels except slight constipation, until five days ago, when they became loose. She has had some sweating of the head for the past two months or so. She has two teeth, which appeared at 7½ months. There are no other symptoms, except that the limbs are exceedingly sensitive to touch. There is no swelling of the thighs. Her diet has been Mellin's food, with cow's milk. The case was recognized as scurvy, and one teaspoonful of orange juice every three hours was ordered, and the patient was directed to report again next day. Nothing more was heard of the child till March 6, 1906, when the mother sent for a tonic for the child. She stated that the pains disappeared so promptly and rapidly that she saw no reason to spend any more money on the doctor. She, therefore, continued the directions I had given her, and the child was soon entirely well. On March 17, I saw the child again. She was just one year old, weighed 16 5-8 pounds, appears to be in perfect health, and is still taking Mellin's food and cow's milk, and orange juice every day.

The next case is a more typical one. It was brought to me on Dec. 30, 1906, with the following history:

First child, and is ten months old. Was breast fed for one month, then condensed milk for two months, then peptogenic milk till September, and then Eskay's with cow's milk, which it is still taking. Bowels are in perfect order. Till two weeks ago had been gaining regularly in weight, but during the last two weeks had made no gain. Seven weeks ago, while standing in the nurse's arms on the street, he seemed to catch cold. He had severe pain in right ankle and knee; then left knee and ankle. The pain and tenderness have been constant and severe. Chiefly located in left knee at present. Has only two teeth, the lower incisors, which came through on Christmas day. The gums are swollen, and purplish, but not bleeding. There is marked pallor now, although the mother insists that the baby was quite rosy till the "rheumatism" developed. Both lower limbs are much swollen. The swell-

ing is indurated; the feet are puffed, the legs swollen, and above the knees the femurs are the seat of an extensive hard swelling, which appears to be sub-periosteal deposit. The bones of the legs are evidently the seat of a similar hemorrhage. Fluoroscopic examination shows the character and location of the effusions. The accompanying photograph shows the child's appearance quite satisfactorily.

A number of physicians had seen this child, and several diagnoses had been made. No one had suspected scurvy, and no one had given any fruit-juice. I ordered orange juice, one tablespoonful every four hours.

December 31. The child is distinctly better. He will go to any member of the family to-day. The swelling is somewhat diminished, and the tenderness distinctly improved. In addition to the orange juice he is ordered three spoonfuls of fresh beef-juice.

January 1, 1907. He has been playing and laughing all the morning. There is very little tenderness, but the limbs are still enlarged. Orange juice every three hours.

January 3, 1907. Improvement is continuing rapidly. He sits up alone, and is bright and playful. Moves his ankles freely, and feet are not more than half their former size. The color of the skin has entirely changed, and he looks like a healthy child.

January 30, 1907. He has continued to improve. All signs of scurvy are gone. He is taking three pints of fresh, raw milk a day, and also the orange juice. With the subsidence of the subcutaneous swelling, the rickety rosary is now quite apparent. I discharge him with a prescription of cod liver oil, with hypophosphites and extr. malt.

April 2, 1907. He was brought in for inspection to-day. Is a splendid looking specimen. Weighs $23\frac{1}{2}$ lbs.

B. G., aged 21 months, was brought to me by a physician in the country on September 30, '07. This child has been fed on malted milk since he was a year old. Before that he had had the breast with condensed milk. He has been a sickly baby, with frequent disturbance of the bowels. Had whooping cough when six weeks old; pneumonia at one year; and two months later had a severe attack of enterocolitis. He began to walk when nine months old, but he

had not walked for the past two months. Rather suddenly, according to the mother, about two months ago, he ceased to walk, his limbs became sensitive, and his gums swollen and purple. His physician regarded the case as one of paralysis, and has been giving him electricity, but without benefit. At this time there are decided evidences of rickets. The rosary is present, and there is kyphosis. The lower limbs, and indeed the whole body is sensitive, the least movement or pressure causing pain, but there is no palpable swelling on the limbs. The upper and lower gums are swollen, and purplish, nearly covering the teeth. They bleed easily. There is an eruption like impetigo on the limbs. Diagnosis: Scurvy-rickets, for which I order two teaspoonfuls of orange juice every three hours. No other change in his feeding, in order that the physician in charge may see the effect of the fruit juice unassisted.

October 1, 1907. The baby is brought in showing extraordinary improvement. The gums are comparatively natural in color. They have shrunk to about half their size yesterday. The tenderness in his limbs is so much better that he sat on the floor, and played to-day for the first time since his attack.

Provided with diet lists suited to his age, and an ointment for the impetigo, and with directions to continue to use the orange juice, the child was allowed to return to his home at once, where he rapidly recovered from all signs of his trouble.

On October 3, 1907, Nellie L., aged 7 months, was referred to me by my friend, Dr. Jos. Martin. This child, whose parents are intelligent, and well-to-do, has been fed practically since birth on peptogenic milk. She is a fine looking baby, and had never been sick till one week ago. Then she began to cry whenever she was moved. This has been getting a little worse all the time, and has been distressing for the past two days. She has no teeth. The gums are not purple, but they are a little bit swollen. The limbs do not show any sub-periosteal swelling, but they are very sensitive to any pressure or handling. Diagnosis: Recently developed scurvy. No change is made in her routine, except that 2 teaspoonfuls of orange juice is ordered every three hours.

October 4, 1907. There has been decided improvement. There is not as much tenderness. Same orders.

October 7, 1907. Tenderness practically gone. There is a noticeable change in the color of the skin, which cannot be described, but is apparent not only to me, but to the mother. I direct to-day a gradual change of the food to plain, raw cow's milk, and prescribe 15 drops of the *vini ferri amaræ* three times a day, orange juice, a tablespoonful twice a day.

October 15, 1907. The child is perfectly well. Weighs 15½ lbs. Is getting only a little peptogenic milk now, the rest being plain cow's milk. Could not retain the iron wine.

December 11, 1907. She is brought in to let me see her condition. She is rosy and very robust. Weighs 17 lbs. 15 oz.

Wm. B., 9 months old, was brought to me on January 7, 1908. His parents are refined and educated people. He has had the best of care all his life. He has just come down from his home in Cincinnati, where his physician had recommended the change of climate. Has been fed on Mellin's food and certified milk. He looks pretty well nourished, and not like a sick baby. Weighs 16 lbs., 13 oz. Was robust till he was six months old, when he began to have indigestion which manifested itself by colic and gas. He would scream for hours at a time. He is very fretful, and cries whenever he is touched. He has no teeth, but the gums do not appear much swollen. The ribs show a slight rosary. The lower limbs are exceedingly sensitive, but are not the seat of any swelling.

The child has had a good deal of earache, but there has been no discharge from the ears. His physician had diagnosed rickets, and had directed appropriate treatment for this condition, but apparently had not suspected scurvy, since no fruit juice had been ordered.

Diagnosis: Scurvy-rickets. I prescribed 1 teaspoonful of orange juice every three hours.

January 13, 1908. The child is very much better, but there is still some tenderness remaining, and the effect of the orange juice has not been as complete as I have been in the habit of seeing. Improvement, however, was progressive, and the child was relieved of all his scorbutic symptoms within two weeks.

Harold S. was brought to me when he was six months old, suffering with severe indigestion. This was on October 22, 1906. He

continued to have more or less disturbance of the bowels throughout the year. About December 14, he was taken to Chattanooga, Tenn., where he continued to be sick, off and on, all the time. In February, 1907, he had an attack of grippe, which lasted three weeks, and on March 29, 1907, I received a letter from his mother telling me he was suffering with a sore mouth. He continued to be upset frequently, with recurring attacks of stomatitis and derangement of the bowels till the summer, when he was again taken to Tennessee.

About August 19, 1907, I had a letter from his mother telling me the child had sore mouth, and derangement of the bowels. His mouth was so sore, and the gums so swollen that the physician who had been called in there "lanced his gums ten times." She reported that he cried constantly, and further stated that "Harold was walking some, but he cannot now." The knowledge I had of his long-continued digestive trouble, that he had been unable to take any milk except Nestle's food (I had vainly tried modified milk and buttermilk), the persistent swollen gums, and the failure of walking, aroused in my mind the prompt suspicion of scurvy, and I at once wrote to the mother to begin giving orange juice, telling her that I believed the child had scurvy.

On August 30, 1907, I heard from her that as soon as the orange juice was begun he improved. The pseudo-paralysis, and the swollen gums rapidly improved, and before long the child was all right.

Before the arrival of my letter, in which I asked her about it, she had discovered for herself that his limbs were very "sore." I felt well pleased with this long distance diagnosis, the condition not having been suspected by the physician in charge, and after my letter, no treatment being given except what I directed by mail, which resulted in prompt and rapid recovery.

As illustrating some of the more uncommon types of scurvy, the following cases abstracted from the literature are interesting. Campbell Pope (Reports of Society for the Study of Disease in Children, 1902) records the following case:

Ivy Victoria H., was born June 24, 1901. She thrived till August 23, when she developed an offensive diarrhoea, from which she recovered by beginning of September. She did well till Janu-

ary 6, when her food did not satisfy her. She had a slight nose-bleed on January 11. Between January 22 and 26, she had pain about one of her knees. On January 29 the child was exposed in a wet blanket in her bassinette. On February 1 her legs were very painful; the urine contained oxalates, urates, and blood. Gravel or calculus was suspected, but was not found by X-ray examination, or by sounding the bladder. Blood still continued in the urine. There is now no doubt about the nature of the illness. The parietic condition of the lower extremities, the screams of the child when approached for examination, the typical condition of the gums in the neighborhood of the lower incisor teeth, together with the periosteal thickening in the left femur and tibia, and to some extent in the right tibia, mark it as one of scurvy. The infant is also decidedly rickety (Exhibited March 21, 1902).

John McCaw (Reports British Society for Study of Diseases in Children, 1902) reports the case of an infant 10 months old whose history was as follows:

The child had been in his usual good health till one week before, at which time he became sick with what was considered a mild gastric attack. Temperature never exceeded 101.5 F.; pulse good and about 100 to the minute; bowels inclined to be relaxed. A short time before McCaw saw him he had vomited a considerable quantity of blood, and this was followed almost immediately by a copious loose motion, composed almost entirely of altered blood.

The child had been fed from birth on condensed milk, and later on a proprietary food and oat flour. It had never been given any fresh milk, or other anti-scorbutic food. Whey and cream, and orange juice effected a complete transformation in a week, so that it seemed another child.

McCaw regarded this case as being noteworthy because of the absence of the more prominent symptoms usually seen in scurvy-rickets. There was no periosteal swelling anywhere at any time, although it was carefully looked for; the gums were quite normal in every respect, and two upper and two lower incisors appeared healthy; there was no preptosis of either eye, nor was there any ecchymosis or edema of either eyelid. Subcutaneous hemorrhages never took place, not even petechial spots on the trunk, or lower

extremities, nor were any bruise like marks ever seen. The child never made any complaint, nor evidenced any pain on being handled, or lifted, and with the exception of a slight beading of the ribs, the distinctive signs of rickets were entirely absent.

It would be easy to multiply examples of unusual manifestations of the scorbutic dyscrasia, such as intra-orbital hemorrhages, hematuria, hematemesis, but the cases taken from my own records, together with those I have just cited, are sufficient to indicate the variety of the clinical manifestations of scurvy in infancy.

DIAGNOSIS: The diagnosis of infantile scurvy is not difficult, provided the physician keeps in mind the fact that obscure painful affections of the limbs in children, and hemorrhagic manifestations may be due to scurvy. Having his suspicions once aroused, the therapeutic test will nearly always promptly settle the question. No disease responds so quickly and astonishingly to proper treatment as scurvy. In many cases the soberer symptoms are abated in twenty-four hours by the simple administration of fresh fruit juice, of which the best is orange juice. It is my habit to make no change of any kind in the food, or the hygiene at the outset, in order that the parents may realize to the fullest extent that the trouble is in fact scurvy, and nothing else. After the diagnosis has been demonstrated, it is well to make such changes in the diet as to ensure the child a plentiful supply of fresh, anti-scorbutic food. Where orange juice cannot be given, or where the child does not seem to take it well, any other fresh vegetable material may be substituted. Thus we may use pineapple juice, scraped apple, fresh, sieved potato, fresh grape juice, and fresh beef-juice, in addition to a liberal supply of fresh cow's milk.

When the scorbutic symptoms have been controlled, it is often necessary to institute measures to combat the rickety symptoms which so often are present at the same time. And tonics containing cod liver oil, the hypophosphites, and some preparation of iron may be administered with good results.

Case of Pneumothorax Following Puerperal Septicemia.*

By DR. J. B. ELLIOTT, JR., New Orleans, La.

Mrs. A. Age 24. Family history negative. Had usual diseases of childhood. Married at age 15. Had one child at age 17. This child now living and in good health. No trouble in first labor. Second child born about July 10, 1907. On third day after had chill with high fever. Was curetted twice—three or four days apart. Temperature high all the time. About tenth day developed peritonitis and was given antistreptococcal serum. Few days later developed pneumonia with high temperature and rapid respiration. On or about thirteenth day of pneumonia had a sudden agonizing pain over upper anterior region of left lung; had to be controlled forcibly—was given morphin. The same pain occurred again in two days. The fever now began to run a little lower course, but respirations always between 50 and 60. Abdomen not so swollen. No uterine discharge.

Saw patient for the first time on August 19. Gave history as above related. Found patient propped up in bed—could hardly talk on account of great dyspnea and rapid respiration. Was putty colored; lips and finger nails cyanosed. Temperature 100; pulse 135, weak and small. Respiration 55. Face slightly edematous, very anemic.

EXAMINATION OF LUNGS—*Inspection*—Absence of all motion on left side; increase on right. No apex beat visible; slight bulging on left side anterior.

Palpation.—Decreased fremitus on right side, anterior. Irregular on left. Absence of all fremitus at left base. Apex beat not palpable but slight heaving at ensiform cartilage.

Percussion—Hyperresonant right lung; left lung anteriorly found high pitch, skodiac resonance, on even very light percussion. Area of cardiac dullness was very small and only began at left border of sternum. Found absolute flatness over base left lung posteriorly from level of seventh dorsal vertebra downward.

Auscultation—Right lung typical exaggerated respiration. Left lung from apex to upper border of sixth rib anteriorly, breathing amphoric in character. No râles present; absence of all respiratory sounds at left base posteriorly—no succussion and no metallic tinkle present.

* Read before Orleans Parish Medical Society, March 14, 1908.

Heart sounds were weak and fetal in character. Liver enlarged; spleen slightly enlarged. Examination of abdomen showed nothing noteworthy. Slight edema of face and legs. Patient complains only of dyspnea. No pain; slight cough. Pulse very weak, unable to turn over or to lie in any way except on back.

Differential count gives: neutrophiles, 42 per cent; lymphocytes, both large and small, 57 per cent; eosinophiles, one per cent; hemoglobin, 40 per cent; leucocytes, 8350.

Urine—Specific gravity, 1025; no sugar; trace of albumin. Thinking it to be a case of pyopneumothorax, introduced a needle and withdrew about 12 oz. of cloudy amber colored fluid. A large amount of air escaped with great force at this time. Respirations immediately fell from 60 to 30 per minute; patient giving a sigh of great relief.

A cytodiagnosis of fluid removed showed specific gravity of 1017; reaction neutral. Neutrophiles, 95 per cent. Lymphocytes, 5 per cent. No bacteria of any kind present. The pulse still ran high. The patient now declared herself to be well, as all pain and dyspnea were gone. The left lung still showed the high percussion note anteriorly but almost normal posteriorly. Patient left hospital on 27th with a temperature of 98 degrees F., pulse 110, respiration 24. No fluid in left pleura but pneumothorax still present. This was evidently a case where a septic enfarct had been swept from the uterus to the right breast, and then lodged in the lung, giving first a septic pneumonia and finally perforation of the pleura and so pneumothorax. The fluid resulting either from an infection or a pre-existing irritability of the pleura; the latter the more probable in this case as the fluid proved negative as to bacteria. The fact that the cytodiagnosis gave us 95 per cent. neutrophiles would argue strongly against tuberculosis, which we know causes from 75 to 90 per cent. of all cases of pneumothorax.

Amongst the interesting points about this case were:

1. Cause septic enfarct over necrosed spot in pleura.
2. The amphoric resonance on auscultation over the pneumothorax instead of absence of all breath sounds.
3. Absence of succussion or metallic tinkle.
4. The fact that although the pneumonia was septic in character, and the perforation undoubtedly caused by a necrosis, yet no

streptococci were found in the exudate. The treatment was the immediate removal of the fluid and with it a large amount of air to relieve the great dyspnea. Then strapping of left side. Heart stimulants were given as needed and forced feeding with little fluid, the bowels were kept freely open. Patient was advised to take iron as soon as possible, and to use lung gymnastics by sitting in chair with healthy lung pressed tightly against back of chair and taking deep respirations. This to be done three times a day for 10 or 15 minutes.

Laryngeal Tuberculosis.*

By HOMER DUPUY, M. D., New Orleans, La.

Volumes might be written on this, one of the most distressful and pathetic affections to which human flesh is heir. It is, however, my purpose to limit myself to brief generalizations based on personal experiences in the observation and treatment of this disease.

A primary implantation of tuberculosis in the larynx is so rare that we need only concern ourselves with the disease as it is transmitted from the infected lung. This complication is so common and in its incipient stages offers such excellent chances of a cure that nothing but gross neglect and unpardonable indifference can account for the large number of advanced and incurable cases that still present themselves for treatment.

Symptomatology. Invasion of the larynx is generally followed by recognizable symptoms, such as a slight recurring hoarseness, a dry purposeless cough, there may be vague feelings of irritation and fullness about the throat, with the slightest discomfort or even pain during deglutition. The diagnosis, however, rests unmistakably on a thorough examination of the larynx. The lesions occur in the form of infiltrations, slight or deep-seated, circumscribed or diffused, and may remain as such for an indefinite period until finally these infiltrations break down, giving rise to ulcerations. These tuberculous lesions may appear in a markedly anemic or in an intensely congested larynx. Any portion of this organ

* Read before Orleans Parish Medical Society, March 28, 1908.

may be affected. The situation of the lesion will produce distinct effects. Should the vocal cords or the inter-arytenoid space be involved, the functional activity of the larynx will be impaired in various degrees, from slight hoarseness to complete aphonia. It is noticeable that this dysphonia is frequently out of proportion to the visible changes in the parts, an ill-defined neurotic element being added to the tuberculous process. Invasion of the posterior portions of the larynx, such as the arytenoid cartilages, is usually associated with difficult or painful deglutition. The voice may remain unchanged, while a marked dysphagia exists. On the other hand, complete aphonia may be present without the slightest discomfort in swallowing. From a mere velvety thickening of the laryngeal mucosa to a distinct neoplastic excrescence, there is an infinite variation in the character, extent and effect of these lesions. It is notable that hemorrhage from the laryngeal tissues, themselves, is of rare occurrence.

Transmission of this infection to the larynx may occur in the earliest stages of the lung involvement, or it may appear when the pulmonary condition has advanced beyond all hope of recovery. In the former the process in the lungs may be making but slow advances, while the larynx, on the contrary, may be the chief pathologic event. The recognition of these two clinical types is most important, as on it hangs the question of proper treatment and the prognosis. When the larynx becomes involved during the advanced stages of the pulmonary affection marked clinically by high temperature, great loss of weight, anorexia, etc., treatment of the larynx must be, and can only be in the nature of palliative measures. Moreover, these ulcerated surfaces invite other secondary infections, which act as additional fuel to the morbid process and but hasten the dissolution. Aggressive treatment in these advanced cases is only adding therapeutic insult to pathologic injury. All we can hope to do is to make the inevitable end less painful by the use of various strengths of cocaine solutions and orthoform powder by insufflation. In the beginning these agents prove helpful, but in a very short time even they fail. I am impressed with the utter failure of our therapeutic measures in this class of cases.

On the other hand, we have another group of cases presenting slight pulmonary involvement or showing a visible arrest of the

pathologic process, in which the extent, character and progress of the lesions involving the larynx itself cause this organ to sound the chief danger signal. As it bears the brunt of the tubercular onset the laryngoscopic examination can be of the highest value as a first aid in arriving at an early diagnosis of both the pulmonary and laryngeal affection. As the laryngeal involvement not only seriously jeopardizes the ultimate chances of recovery, but exerts a positive deleterious influence on the disease in the lungs when it otherwise shows hopeful signs of a cure, it is of prime importance under such conditions to give precedence to the care of the larynx. This vulnerable point once lost, the odds are tremendously against us. The portal of entrance to the food-tract must be kept free from any morbid alterations in order to carry out successfully its high feeding which now continues a part of the general treatment.

Treatment. Formol solutions, 5 percent to 20 percent; lactic acid, 50 percent to 75 percent; the galvano-cautery, applied thoroughly and persistently with the proper technical skill under cocaine anesthesia, adapting each of these agents to their particular fields of usefulness, according to the character of the lesions, is yielding most brilliant results.

Voice rest is an essential indication in all stages of the laryngeal disease, and in the incipient developments it alone can effect a local cure. Care with climate is better than climate without care. The general treatment must not be forgotten, and yet it cannot exclude the intelligent care of the larynx.

Prevention. The most potent means of preventing laryngeal tuberculosis is the early recognition of the pulmonary affection, followed by an immediate application of the modern hygienic and dietetic treatment. We must recognize certain factors which undoubtedly predispose to invasions of the larynx. Impeded nasal respiration means that unprepared, unheated and unfiltered air enters the lower respiratory tract, with its accompanying deleterious influences. Such affections as atrophic rhinitis, accessory sinus diseases and chronic tonsillar inflammations, act as explosive material, disturbing the normal integrity of the laryngeal mucous surfaces, rendering them more vulnerable to the infected sputum ejected from below. Excessive use of the voice, dusty occupations,

and purposeless coughing, are prone to irritate the parts and prepare the soil for infection. Minimizing the use of the voice in all the pulmonary cases and the reduction of irritating coughing, are to be insisted on as preventive measures. The slightest throat disturbance in a known tuberculous patient must not pass unnoticed. The advent of the disease in the larynx is at times so insidious that the routine inspection of the throats of all consumptives is along the lines of modern prophylaxis, as the early detection of the laryngeal involvement means the lessening of pain, the prolongation and the saving of lives.

Early Symptoms of Pulmonary Tuberculosis.*

By DR. GEORGE S. BEL, New Orleans, La.

So much has been written on the vast and vital subject allotted to me that a great part of my paper must needs consist of a resumé of familiar facts which I can only enhance by my observations, both clinical and physical upon the numerous cases with which I have come in contact at the hospital, both in clinics and wards, and in private practice.

Of primary importance to my mind is the earnest excitation of a suspicion of the disease. Such a feeling once created in a conscientious practitioner, should demand its absolute satiation. Should our own armamentarium of ability or experience not justify a positive conclusion, a consultation at such a critical period seems to me a more rational *modus operandi* than the ordinary consultation which, as a rule, is nothing more or less than a division of somatic responsibility. It is of extreme importance in examining a suspected case of phthisis that the physical methods and clinical methods be followed carefully, and it may be said to the credit of the diagnostician that in the vast majority of the cases a correct conclusion may be arrived at by the intelligent interpretation of the physical signs and general symptoms, before it may be reached by a bacteriological examination, and with no less certainty.

Originally, and first pointed out by Larmee, the primary lesion is most often situated at the apex of the upper lobe, and more re-

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cently in the admirable analysis by J. Kinston Fowler, the primary lesion is most often situated from an inch to an inch and a half below the extreme apex of one or the other lung, nearer the external and posterior than the anterior surface, whence it spreads downward and backward, and hence should be sought for in the suprascapular region, since clinical signs of the disease may be discovered here before it appears in front.

Anteriorly, the primary focus corresponds either to the supraclavicular space or to a spot immediately below the center of the clavicle.

Pardon my description of the primary seat of tubercular lesion, as it properly belongs to the chapter on pathological anatomy, but was influenced only by the importance of the precise knowledge of the early involvement by its value and practical bearing on its early clinical detection.

Before attempting to explain the physical signs which accompany the tubercular invasion of the lungs in the chronic variety of the disease, I will take up the general clinical picture and its symptoms.

The modern teaching of the curability of tuberculosis depends upon early diagnosis. Every physician of any experience knows that cases referred to him as latent or incipient are likely to be far advanced. They should be recognized before the stage of extensive infiltration, and certainly before softening has begun, if the best results are to be obtained.

When so recognized at least 80 percent can be restored to apparent good health, and the larger number of these should remain well under proper conditions.

Will now consider the various symptoms.

Cough. In a great many cases cough is the first symptom, and may be one of the most constant symptoms throughout the disease. At the beginning it is so slight, often unnoticed; the patient is little aware of it, and may be denied by the patient even though audible to the examining physician. At first there is only a slight hacking and hawking of a dry type, occurring mostly in the morning, but later also in the evening.

Some individuals are susceptible to colds, these attacks become more frequent and grow more severe, and suddenly these colds

become decidedly troublesome and some patent cough mixture is taken, example, Dr. ****'s Pine Tar, etc., for the cold which the individual attributes to la grippe, bronchitis, and as these patent cough medicines contain some preparation of opium or chloroform, the cough is improved for a time, but only to return, and resisting treatment more stubbornly, and medical advice is then sought with the proper interpretation and significance of the symptoms, but I am sorry to admit the physician very often, simply by a careless and superficial examination, confirms the patients' opinion by stating the condition is only a bad cold, la grippe or bronchitis, and valuable time is lost by this trifling method, and the individual is growing progressively worse, and when the lungs are carefully examined the physician is surprised to find an extensive involvement.

Temperature. Fever is an early and characteristic sign, and great aid in early diagnosis. In the early stage the presence of slight fever is apt to escape observation, unless the temperature be taken at comparatively short intervals. Direct patients to take temperature, or have it taken, every two hours for several days, and make a record of it. In all tubercular cases with fever, the maximum rise is in the afternoon or evening, but we may have an increased temperature with the evening normal.

In the majority of cases the temperature curve is one which is normal or subnormal in the morning, and rises to 99° or 100° F., between noon and night. Remember the temperature may rise after slight exercise, excitement or eating.

Emaciation. Gradual loss of weight is very suspicious.

Anemia is an early and constant symptom.

Indigestion. Dyspeptic symptoms are common in the early stage of tuberculosis, but frequently overlooked, and patient is treated with digestive ferments and tonics, and the loss of weight and strength is attributed to that cause, when it should be traced further back and a careful examination of the lungs be made, and much valuable time saved.

Constipation is the rule in the early stage.

Pulse. The rapidity and excitability of the pulse, associated with other symptoms is extremely important.

An increase in pulse rate in the absence of fever or accountable

causes should be regarded as suspicious of early tuberculosis.

Hemoptysis. It occurs early and late in the disease. It may be the first premonition of the dread destroyer. Hemoptysis in the absence of other causes among all the symptoms which may be found in the history is one of greatest importance.

Night Sweats. This troublesome symptom is rare in the early stage.

Pain. Pain may, or may not be present, and is not a typical sign of the disease. When present, is generally due to involvement of the pleura.

Dyspnea is often absent except as it may result from exertion.

Sputum. In the incipient stage it may be absent or scanty, and mucoid. May not contain the bacilli.

Pleurisy. Sometimes the first symptom to attract attention in some cases is dry pleurisy, with friction over apex. Most idiopathic pleurisies are tubercular. History of pleurisy is suspicious.

Hoarseness is sometimes an early symptom, even when there is no involvement of the larynx.

Physical Signs. Pulmonary tuberculosis is met with in chests of all shapes and capacities.

From the typical paralytic or phthisical thorax to the one which is well developed, and also in individuals who are well nourished, robust looking and apparently in the bloom of health, tuberculosis may be detected.

Inspection. At the very incipency may be negative, or little is to be seen. A few scattered tubercles give rise to no phenomena appreciable to our senses, but as soon as they are sufficient in number to interfere with elasticity, or to increase the conductivity of the lung tissue they produce objective signs. On the other hand, if any wasting has occurred the clavicles are rendered more prominent and there may be slight flattening below one or the other collar bone, as well as deepening of the supra-clavicular fossa.

Expansion may be slightly diminished in the same region. Deficient apical expansion is an early and important sign. It may be best estimated by taking a position behind the patient, who should be seated, and looking over the shoulders.

The vaselike shadow caused by rhythmical rise and fall of the diaphragm on the affected side is known as Litten's sign or Litten's

diaphragm shadow; is seen to be altered early in pulmonary tuberculosis.

It is a diminution of the excursion of the diaphragm, or, in other words, consists in a limiting or shortening of the normal shadow on the affected side.

This sign is important and should always be sought for in suspected cases.

Palpation.—Palpation may be negative in the incipient stage, as it is difficult to estimate slight increase in conduction.

As condensation or infiltration progresses vocal fremitus is increased. If, however, vocal fremitus is equal on the two sides indicates an increase on the left, or if it is greater on the left side than the right, the fact is significant. (Remember normal vocal fremitus is somewhat greater on the right side.)

Percussion.—In the earliest stage percussion may be negative or uncertain. There are not sufficient tubercles at this stage of the disease to help very materially. The effect of these small areas of consolidation upon the percussion note is more than counterbalanced by the resonance of the surrounding healthy portions of lung tissue.

Later on the dulness observed is usually very slight, often requires much experience to detect it, and particularly if at the apex is of immense significance.

Still later, when infiltration has increased, due to sufficient deposits of tubercles, moderate dulness is readily detected.

Hypersonous note at the apex, if unilateral, is a valuable sign of an incipient involvement.

Auscultation.—This is the most important physical method of examination. The first of procedure is to have the patient breathe naturally, and carefully compare the corresponding portions of the two sides before having the patient taking long and deep breaths or to cough.

The earliest auscultatory sign is, generally speaking, feeble breathing, owing to a diminution in the amount of air entering the bronchioles and air cells of the affected area. Make a careful comparison between the two sides during quiet breathing. Inspiration on the affected side may be inaudible.

Next in order of sequence is a prolongation of the expiratory murmur. About the same, or little later the inspiratory sound

grows harsher, rougher. The rhythm often becomes very jerky, occurs chiefly during inspiration and is described as cog-wheel respiration. If cog-wheel respiration is confined to one apex it is suggestive and suspicious sign, but if found throughout both lungs, as is often the case in nervous individuals, it is of no value. (As the disease progresses the type of breathing becomes broncho-vesicular.)

Adventitious sounds.—Râles may be absent for a considerable period in the incipient stage. When râles are detected on quiet breathing the case is no longer in the incipient stage. In the very early and true primary stage we have no râles, but at a later period, but still in the early stage, fine uniform crackling râles are heard only during forced inspiration, especially at the end of inspiration following cough, and limited to apex of one lung. As the presence of these fine râles is a valuable sign I will explain the method used for their detection. Direct patient to cough at the end of expiration and the deep inspiration following cough the râles are most likely to be heard. As we frequently meet patients who do not know how to take a long breath I tell them to blow out all the air they have in chest and hold their breath, and the full inspiration which follows is of value in eliciting râles; or have them count 1, 2, 3, several times.

DIAGNOSIS AND RECAPITULATION.—Every effort should be made to arrive at an early diagnosis, before the disease is advanced and without depending on the finding of tubercle bacilli in the sputum.

There are cases in which expectoration is absent, or, if present, does not contain tubercle bacilli, and we are compelled to depend on other means. The physician who declines to make a diagnosis on account of the absence of the tubercle bacilli is making a grave mistake and assumes a great responsibility.

In some early cases there may be no recognizable physical signs, and we must remember some lesions are deeply situated and covered by healthy lung tissue, and it is in such cases the diagnosis may be established only by the history, clinical symptoms, and tuberculin injection.

A history of possible infection as living in the same room with consumptives, working in the same office, workshop or any association with consumptives.

Personal history as regards to dusty and confining occupations, unhygienic mode of life, living in dark, damp rooms, alcoholism, previous history of pleurisy.

Gradual loss of weight and strength, and fatigue after slight exertion, loss of appetite, dyspeptic symptoms are important. Light, dry, hacking cough, especially in the morning.

A persistent temperature without apparent cause.

Tachycardia, pulse frequent and low tension. Hemoptysis rarely profuse, usually being only streaked with blood.

The recognition of early physical signs as slight flattening below the clavicle on affected side, deficient apical expansion of affected side, diminution of excursion of diaphragm on affected side.

Moderate impairment apical resonance on affected side. Slight changes in the breath sounds at apex of affected side as feeble breath sounds, prolongation of expiratory sound. Harsh and rough inspiratory sounds, and may have the noisy, jerky respiration. Fine crackling râles heard only during forced inspiration, as by coughing.

We must not expect to find all the above symptoms and physical signs in all cases of suspected or early tuberculosis. Some cases present many of the above symptoms and others only a few. Three or more of these signs combined are sufficient to subject patient to treatment. Example: Disturbance of nutrition, loss of weight, associated with cough.

Remember, cough and hemoptysis are more valuable signs than the loss of weight and strength and rapid pulse.

If the clinical history and physical signs are not sufficiently diagnostic, and where there is no sputum, or if present, there are no bacilli on repeated examination, we should then resort to the tuberculin test.

Tuberculin has its advocates and its bitter opponents. Formerly I used tuberculin frequently with most satisfactorily results, but of late years I have been able to arrive at a positive diagnosis with clinical and physical methods in almost every case, therefore employ it very seldom, and use it only as a last resort.

Ophthalmo-Tuberculin Test.—Calmette has shown tuberculin as a diagnostic agent by dropping it into the conjunctival sac. At first one drop of one per cent is used, and if no reaction occurs two drops may be employed after a few days.

X-Ray.—It is said the skilful use of the fluoroscope throws much light upon the condition of the lungs in incipient tuberculosis. I have no personal experience with this method of diagnosis. My colleagues, Drs. Amédée Granger and Adolph Henriques, who are experts in this method of examination, have made extensive studies and obtained valuable information, and regard it important in early diagnosis.

Special Comment.—Certain points are absolutely essential to the proper examination and early diagnosis of tuberculosis.

The technic and methods of procedure are of vital importance. Example: The technic and method of percussion requires more perseverance in acquiring manipulative skill than any other method of physical examination.

The knowledge of the sounds produced by the various manœuvres in the normal chest, etc.

Unilateral variations are infinitely more important than bilateral ones in early cases.

Remember, the disease usually begins at the apex; more frequently in the suprascapular region.

Finally, in short, the important areas are the apex, posteriorly and anteriorly the inner lung borders and the region of the interlobar fissure posteriorly, as roughly indicated by the scapular border when the arms are placed on the opposite shoulder.

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P. L. Thibaut, M. D., Chairman.

Electricity in Medicine.

By DR. NARCISSE F. THIBERGE, New Orleans, La.

Before introducing the subject, I wish to offer a few words of apology and explanation. As my experience in this extensive branch covers a space of only four years, it is comparatively so meager that I have deemed it advisable to add to it the crystallized opinions of the electro-therapeutists of to-day. I claim little of

originality for this paper except its method of arrangement. The information that it carries, however, will prove of interest and be useful in our choice of method. Many times electricity is blamed for failure because the selection of current has been injudicious. This agent is a powerful adjuvant to internal medication. The general practitioner should clearly interpret what this form of current will do for one case and what this other form will do for another case with opposite indications. Take for instance an over-excited nerve keeping a patient awake—apply positive galvanism and the nerve will be soothed; when that same nerve is meshed in cicatricial tissue the pain will be more quickly dispelled by the absorbing negative electricity; tachycardia is relieved by the anode to the vagus, while the cathode is a circulatory stimulant. Transfer the poles, the symptoms are increased and electricity is blamed as a harmful agent. Here it is not the application but the physician, who, unequipped with a proper idea of the exact effect that a special current causes, is dangerous to the patient.

Innumerable are the indications possible to be met by electricity either in the form of electro-magnetic, sinusoidal or high frequency, galvanic or faradic, or as the X-ray and electro-cautery, or as a generator of heat, light, ozone or vibration. So vast is the field, so multiple and dissimilar the effects that we can considerably forgive the over enthusiast for looking upon it as a panacea. Metabolism in general is aroused by it and a better nutrition of the body functions is assured, especially as this effect is directed towards the nervous system and the circulatory apparatus. We can re-establish communication between the muscle and its nerve, and reconnect the center with the periphery; raise or lower the blood pressure; re-animate functions of organs disturbed by disease; destroy parasites; expel toxins from the system; and destroy new growths.

I will now invite you to review briefly the local and systemic effect of each variety of current separately and to draw their therapeutic indication therefrom.

As a diagnostic help for fracture, dislocation, inflammation of the osseous system, location of urinary calculus or other foreign body, the study of deformity, pelvic diameters or heart area, we cannot value the X-ray too highly. The skiagraph with its exten-

sive application has come to stay, but not so for its therapeutic value. I have devoted days and days of close application for over two years in treating malignant growths and have not seen it do any permanent good; epithelioma and lupus ulcer shrink and disappear under its influence, stop the treatment and the growth recurs; subject the glands and marrow canals of a case of Hodgkins' disease to it, you are gratified to see the glands diminish, but the patient's strength diminishes still faster; a carcinoma improves to a certain extent and refuses to improve any more—push the treatment and you have an ugly X-ray burn. Unless the ray be further perfected and deprived of its venom, it is my opinion best to hold it as a palliative and a prophylactic against recurrence after excision and to have it administered gently with the latest lead glass-shielded tubes only by a well qualified expert.

The *static current* seems to exert a peculiar happy effect over the neurasthenic; it is a powerful stimulant to metabolism which in these individuals is at the ebb, the pulse tension is quickened, arterial tension is raised, an increased quantity of urea is thrown out, while the over-wrought nerves are calmed. Briefly stated, it is a sensory sedative, a motor and trophic stimulant and a vaso-constrictor. It is a splendid thing for migraine, for almost all forms of neuralgia and for all hysterical manifestations. How far the psychic effect in this last condition contributes to the happy result has not yet been settled. In gout, diabetes and rheumatism it may be applied. In eczema it has also yielded gratifying results except in seborrheic form, where high frequency is preferred. Though often generated by the static current, the high frequency differs markedly from it by being a vaso dilator, causing a lowering of the pulse tension; diaphoresis and a loss of heat. Like the static it has remarkable analgesic properties, stimulates excretion of CO_2 , increases urea excretion, neutralizes toxins and it is even advanced as a germicide. Unless administered in the form of a spark, it has no influence over motor nerves. To my mind this treatment finds its best indication in those whom the French term "neuro arthritic". Its effects on rheumatic deposits, arthritis and neuralgias in these individuals are nothing short of marvelous—as I can attest from personal experience. Its stimulating and correcting influence on urea excretion probably accounts

together with its analgesic virtue for the gratifying results obtained. We have to bear in mind that the absorption of these deposits is not all but a restricted diet and a good nerve tonic have to be associated with high frequency application. While we remove the cause we have to cure a habit. For varix, hemorrhoids, alopecia, orchitis, and pruritus it has also been recommended.

Now comes for consideration that form of current best known to all of us—the *faradic*, a vaso dilator, it causes a sensation of warmth and is used principally for its effect on the voluntary muscles, stimulating their growth as well as their function of contraction. It stimulates a dilated stomach, rouses up anesthetized nerves, relieves atonic constipation, relieves all myalgias, is given in goitre as a vagus and sympathetic stimulant, prevents muscular atrophy, cures urinary incontinence, and when applied persistently, it relieves spasmodic strictures wherever situated. In all forms of paralysis when re-acting apply faradic current to the muscle.

Having no personal experience with the *sinusoidal* current, I can only direct your attention to its physiological indications. The increase and decrease of this current with its 10,000 or more interruptions per second is so gradual that the voluntary muscles do not respond though the non-striated do so energetically. The striated muscular envelope of our body though thrown into tetanic contraction by 20 interruptions per second, allows this immense current to filter through like light through a glass to fasten its effect on the contents producing increased metabolism and marked ionic action.

All currents possess a chemical as well as a physiologic action on the organism, but the chemical factor becomes so marked when the *galvanic* current is given in massive dose that it has been utilized to destroy growths and to force into the system nascent elements of compounds applied to the tissues and submitted to its influence. The selection of the pole is also more important than for other currents. The positive pole is also analgesic and vaso constrictor in mild currents, and in heavy currents becomes the acid coagulatory pole, giving off nascent halogen or hydroxyl acid radicle, sending it through the tissues towards the other pole; while negative pole is stimulating, a vaso dilator and resolvent dividing bands of cicatricial tissues and relieving over congested organs and

in massive dose it becomes the large collecting alkaline pole. When the electric current divides a compound into its elements there results electrolysis; when these elements are transformed "en masse" from positive to negative pole, it is called cataphoresis.

In order to fix these processes accurately in our mind, it would be well to go back and study the ionic theory. Though a dissociated portion of a molecule, an ion is a group of similar atoms in activity. The different atoms in a molecule of an acid solution no longer hold each other closely together, for, on plunging the poles in such solution, two camps of ions having opposite affinities are formed, one group pushing to the positive pole, the other to the negative; this transfer in the tissues gives us the primary electric current which produces the physiological effect, stimulating metabolism, motion and sensation, continued for a longer time the tissues are saturated and act as chemical elements, the halogen radicle to the positive pole, taking H from the tissue and the alkaline metal at the negative combining with the (HO) hydrogen radicle. When these are saturated a new chemical compound such as HCl, at the anode and Na(HO)₂ at the cathode appear and exert the tertiary effect of currents with a liberation of free O at the positive and free H at the negative. The primary current gives rise to ordinary *galvanization*, the secondary to *electrolysis* and the third to *cataphoresis*.

The general rule is galvanization to the nerves and faradization to the muscles. It is better to wait two or three weeks after the subsidence of high temperature in infectious paralysis and a month after hemorrhage. On account of its solvent action the negative pole is applied to edematous tissue, enlarged glands, swollen and stiff joints, hypertrophied or cystic goitre and recently has been recommended in cerebral hemiplegia to cause absorption of the clot. As a stimulant the negative pole has been used in quite a long list of paralysis, being applied to the spinal column in the following conditions: hemiplegias, acute poliomyelitis, progressive muscular atrophy, Frederick's disease; in fine all the affections of the cord, while in the following conditions the part involved has been treated with the cathode; all neuritis, even that met in tabes and optic neuritis, herpes zoster, spasmodic constipation, neurasthenia (solarplexus). The positive pole being analgesic has been

recommended in nervous vomiting, hiccough, asthma, tachycardia, lumbago, functional impotence, glaucoma (S), neuralgias, globus hystericus and metritis. It is a peculiar fact that mild galvanism applied to any of the special senses will elicit its special function; applied to the tongue, we taste it; to the closed eye, we have an impression of light; to the motor nerve muscular contraction; but hearing on account of its deep seat is only elicited when the labyrinth is inflamed. For the study of the tertiary or cataphoretic effect I refer you to my able friend, Dr. Amédée Granger, who has made of this a special study, and in closing wish to add a few words about the secondary effect or electrolysis. The cathode dissolves organic stricture, papilloma, warts, polypi and fibroids, and is used as a depilatory; the anode is used to control hemorrhage and to occlude aneurysmal sacs.

Such is my interpretation of the physiologic and chemical effects of the different varieties of current. Fully conscious of its incompleteness and imperfections, I submit it to be corrected and improved by you. The benefit that the writer expects is not so much the little mite of personal information that he adds as the opportunity that he creates to cause others better versed in the science to state their views and their experience.

DISCUSSION.

DR. KEITZ: There is little to be said in addition to the experiences and opinions so ably set forth by Dr. N. F. Thiberge in his paper.

The prejudice which many members of the medical profession hold against the use of electricity is the unavoidable reaction following the disappointment of those who considered it a cure-all and found some cases in which the results were not as satisfactory as in others. Excessive enthusiasm is almost as harmful to a remedy or to a modality as an unreasonable skepticism. The calm, careful and dispassionate inquiry and discerning observation are the purifying process which assigns to every remedy its proper place, and informs us of the limits of its application.

Referring to the X-ray as a *curative* agent in cancer, I hold the same opinion as Dr. Thiberge. Yet, while the ray does not erad-

icate the disease it has prolonged many a life and has allayed much pain and suffering. This is a far better result than we could heretofore obtain from purely surgical procedures. I should warn against too long and too frequent exposures, and too high a vacuum.

X-ray disorganizes (dissolves) morbid growths, and we must guard against overcrowding the lymphatics with debris. "To make haste slowly" is an advice which cannot be heeded too carefully.

Last year I reported to this society two cases of obstinate gastric catarrh. One of these cases was seen by me about two weeks ago, the other three months ago. Both considered themselves perfectly cured.

I have no experience with the high frequency current, but I intend to use it in the near future.

Faradic Current.—The best known of the currents, the faradic, always gives the expected results when properly applied. I have used, and still use, faradization in all cases of infantile inanition (tabes mesenterica) with the best results, the positive pole over the spine, the negative over the abdomen. I am of the opinion that the absorption of the indurated, infiltrated and, no doubt inflammatory products in the glands is greatly promoted by this powerful vaso-motor stimulant.

Static Electricity.—A modality which has given me great satisfaction in neurasthenic cases is the static breeze, applied from fifteen to thirty minutes at the time, every third or fourth day. The positive head breeze (the patient being negatively insulated) has never failed me in neurasthenic insomnia and in all cases of nervous depression.

In all cases of neuralgia I have had splendid results from the brush discharge; it has to be applied quite often, even twice a day, in severe cases, and is said to act through the oxygen (ozone) which comes in contact with the painful tissues.

It may be interesting to mention a case in connection with Dr. Thiberge's remarks regarding the effect of static currents on rheumatism.

W. C., æt. 40, suffered from an attack of acute rheumatism in the summer of 1904. His recovery was slow, and he complained of occasional pain in the right ankle, the joint first affected. As I

did not attend him during the attack I cannot speak of the treatment. In spring 1905 he felt the disease would recur. Both ankles were swollen and painful, though there was no positive fever (temp. 99.2).

I used static insulation with sparks at the painful joints. Three treatments effected a cure. The recurrent pains with stiffness disappeared, and up to the present day he has not suffered in the least.

While one case is not a criterion of merit, nevertheless it may cause others to try this method, and, I hope, with the same satisfactory result.

In tachycardia I use static electricity invariably. The negative head breeze has given excellent satisfaction, with caffeine and strychnine as adjuncts. Static electricity afforded speedy and permanent relief when the fore-named remedies alone did not apparently influence the condition.

It has been contended that much of the good effect of static electricity is due to the psychic impression. While it matters little what cures (or relieves) our patients I cannot agree with this view.

Patients often step on the platform with fear and trembling, a state of mind which is depressing, if anything, yet after the first treatment they assured me of feeling better.

The increased metabolism, increased excretion of urea and CO_2 , sleep, etc., can hardly be due to the psychic effect on patients who considered the treatment with doubt and misgiving, to say the least. Whatever the agency the curative effect may be due to, psychic, chemical or physical, static electricity in all its modalities has been a great help in my practice.

Galvanic Currents.—I should desire to mention a condition on which opinions and experiences differ. I refer to urethral stricture and to enlargement of the prostate. As I am approaching my time limit it will not be possible for me to cite some of my cases, but I may be permitted to state that in both conditions the negative pole has given me remarkably good results.

I am using the galvanic current constantly in ovaritis, ovarian neuralgia and congestion of the uterus, and the results have been so satisfactory that I have no occasion to resort to any other mode of treatment.

This is a short outline of my work in X-ray, static and galvanic treatments.

DR. GUTHRIE: I want to protest against his conclusion as to the universality of the recurrence of the malignant growths treated by the X-ray. I have had cases which have now gone for over three years without any signs of recurrence. I have had them under observation and know whereof I speak. Dr. Thiberge's views are not borne out by other observers.

DR. THIBERGE (in closing): In making this report about X-ray work, I have done what I consider should be done in cases—reported my personal experience frankly and candidly. I have so frequently seen these growths recur after being treated by others as well as myself that I cannot look upon this agent as curative. The section that deals with ionic theory is not advanced as a fact, but only as a synopsis of present knowledge on the matter.

Medico-Legal Consideration in Cases of Mental Defect or Disease.

By DR. E. M. HUMMEL, New Orleans, La.

No man is law abiding from purely instinctive or natural adaptation. To be so one must have recourse to his higher intelligence, whereby he is enabled to subordinate his elementary impulses to rational considerations, and assert the mastery over his more feral self. All civil and criminal laws curtail individual freedom of action, however much they may confer in return. They all put a penalty upon the indulgence of even the most natural impulse or passion indiscriminately. To be law abiding a man must bring himself, through the superior processes of reasoning, *en rapport* with the spirit of the law, must believe in its efficacy and beneficent ends, and must in addition be in a position to inhibit his impulses under the stress of provocation, and at least forego satisfaction of even entirely natural cravings, or defer action to the arbitration of the law. For a long time we have dwelt under the restraints of law and the precepts and refinements of civilization. By this practice the race has acquired a fitness for this order of things. We have acquired mechanisms through practice which confer upon

us a sense of morality and honesty, a character, because of which we give preferment to what is right according to the law. In this manner we have become in large measure law abiding by inclination.

Sane men clearly see the necessity of regulated, orderly community life, and not only deny themselves illicit indulgences, but lend their efforts to the strengthening and enforcement of the law statutes. A criminal is a man who responds to the "call of the wild", and attempts to evade or directly transgress the law to gain immediately selfish ends. Most criminals are both inordinately selfish and wantonly careless of the rights of others. An insane man through defects of the reasoning process fails to recognize his individual status, his obligations to his fellow, and either aimlessly, from false premise or through lack of ability to control a normal or abnormal impulse, breaks the law. The essential legal difference between a criminal and an insane transgressor lies in the presupposed ability on the part of the former to inhibit his actions and confine his behavior within legal bounds. The fact that so many criminals are defectively organized has given rise to the contention that all chronic offenders against the law are in a measure irresponsible. However this may be, it is unquestionably true that the two classes shade into each other by imperceptible degrees; and herein lies the stumbling block of alienists and criminologists when called into law courts to establish the sanity or insanity of the accused. Men who through the peculiarity of their cerebral organization find themselves out of sympathy with the purport and methods of constituted law, and whose disposition is distorted with abnormal proclivities for anger, lust and avarice, lead them to commit crimes, form a difficult group to classify. They are socially unfit. They are borderland cases about which there is much honest difference of opinion. However, it is undoubtedly true that intelligent, scientific discrimination is not always made between those who offend against the law from wanton malice, and those who do so through defection. It is even held by the advanced school of criminologists that all so-called criminals are defective. Certain it is that our asylums, which should be hospitals in every sense of the word, devoted to the intelligent care and treatment of the mentally invalided, are often

forced to take those who might more properly be committed to a penal institution. And contrariwise, many mentally irresponsible are penalized and made to suffer punishment for acts the nature of which they had no proper comprehension. In the course of time no doubt more correct refinements of discrimination will be made as our penal systems are evolved, and standards of greater special knowledge is exacted of those placed in charge of the institutions for the care and treatment of the insane.

Reference has been made repeatedly to the borderland cases, people unusually endowed mentally, whose responsibility before the law it is difficult, sometimes impossible to determine. I submit it as my opinion that all these delinquents are mental defectives closely akin in their weakness. The effective nature of some is distorted, while the intellectual processes of others is broken so that they are incapable of exercising control of their actions. All are incorrigible, and a menace to society, and society would be better off without them. When these defectives commit grave crimes the question of their sanity or insanity becomes the pressing question, and an array of partisan experts proceed to bring reproach upon themselves and the profession. I fail to see the sense of quibbling over technicalities dragged into the case. Inasmuch as the object of criminal legislation is not the visitation of vengeance upon an offender, but the prevention of crime, what is the injustice of disposing of this class of offenders in such a manner as to preclude the possibility of their repeating their crimes? If our legislature could be prevailed upon to enact a law providing for the imprisonment, for the rest of their natural lives, of the insane who have committed grave crimes, we would not have the plea of insanity entered so often to facilitate escape from the penalties of crime. There should be a department set aside in one of our penal institutions for the incarceration of these offenders. The present practice of committing them to institutions where the innocent sick are treated and cared for is radically wrong. They have most ready means of escape there, and only to offend the helpless around them. They should be in custody of a prison warden, not a physician, who is unable to do anything for them, nor is he paid to discharge the duties of a prison official. An expert, to be an expert, must be free from any influence which may in any

way bias his judgment. I heartily agree with our President, in that experts should be chosen and compensated by the court only. If this be done, no one may impugn their motives in rendering an opinion. Some such step is not only desirable, but imperative, if we would retain the respect of the public.

The radically insane are liable to take most any departure from rational courses of action. Their actions may be offenses against decency, blind violence against property or person, without any purposive or intellectually co-ordinated action toward the commission of crime. Or else their conduct may be based upon systematized delusions, or again reason is sufficiently preserved to admit of a certain show of consistency, but through a break in their mechanisms for spinning the chain of logical sequence, false conclusions and inferences are drawn, which, when used as the basis of conduct, give rise to incongruous actions. It is with the latter class of defectives we are especially concerned here.

Ignoring the class of cases resulting from gross trauma, exhausting disease, auto-intoxication and the kind and aspect of various neuro-psychoses presenting stupor, amentia, dementia, apathy, psycho-motor inertia, or partaking of the nature of deliria, wherein the patient merely needs nursing and medical supervision; I will draw attention to several classes of the mentally affected, the complication of whose peculiar derangement leads them to disturb the peace, squander their means, bring reproach upon their family, commit assaults or homicides, etc.

Patients affected with dementia-precox, in the early stages of their attack, may become wildly excited and commit assaults, which, while they are scarcely vindictive or purposive, are effective and may be accompanied by grave consequences; or else the attack may be especially of an hallucinatory type, which hallucinations may impel the patient to attack those around him or do violence to himself or destroy property. As a rule they are confused, and not to be dreaded. Later on, the apathy which settles upon the subject, and so lends to the picture of dementia-precox, renders him practically harmless.

The insanities accompanying epilepsy are to be taken account of in this connection, because they not infrequently lead their victim into brutal assaults. Subjects of epilepsy are liable to lapse into

subliminal states of consciousness, under which ban they may be totally swayed by some hallucinatory concept inviting them to homicidal or destructive attacks. The physician may be called upon to decide the mental status of such a case, and he may have to draw his conclusions from the nature of the circumstances under which the crime was done and the patient's characteristic, for not always is the history of convulsions to be gotten. Many epileptics are affected with a misanthropic temperament which gets them into difficulties.

When a man of neuro-psychopathic tendency drinks alcohol steadily for some space of time he becomes affected with a certain form of mental aberration which makes him dangerous to those around him, especially to his family. In the well developed forms of this psychosis hallucinations of a persecutory nature and a deeply suspicious state of mind give rise to strong delusions of persecution and supposed wrong. So often do men thus affected suspect the fidelity of their wives that this has been recognized as a cardinal symptom of the disease. Wife beating and murder are their peculiar crimes. It is obvious enough that they should be immediately taken into custody upon recognition of their condition. A man of good stability may abuse his neurones with this drug so long and so persistently as to alter his rightful and natural personality radically. From amiability he may be changed to moodiness and a misanthropic and unsocial turn of mind. His finer mental attributes being destroyed he is brusque and shows a brutal lack of consideration for others.

In the early stages of paresis, during a mild megalomania, before his relatives or medical attendant have felt warranted in having him committed, or even before his condition has been recognized, the man so affected may squander large sums of money in visionary schemes or debauchery, leaving his dependent family penniless. Inasmuch as they thus bring reproach and distress upon their helpless dependents it is desirable that they be taken in charge during this stage of the disease, even though they be able to give a plausible account of themselves. It is far from easy, however, to recognize paresis in its first stages, and the experienced man may have to hesitate long before certifying a case.

A melancholiac is never dangerous to any one but himself.

Those so affected are, indeed, ill, and need our treatment and sympathy. In the maniacal stage of manic-depressive insanity the patient is usually exuberantly happy. Sometimes, however, they take an angry turn. Or else they may be guilty of extravagant conduct to the social or financial detriment of themselves or family.

Absolutely the most dangerous form of mental disease is paranoia. The essence of paranoia is a group of systematized delusions. These delusions practically always take a persecutory turn. As a consequence the subject of them commits grave crimes in retaliation of his supposed wrongs. In the early stages especially his sanity is not involved to a great extent which makes him all the more dangerous, as he is then more successful at his attempts at crime. A paranoiac is in the same position, subjectively, as a man who is being grievously wronged by another or others. His grievance is quite as real to him as if founded upon material fact. All paranoiacs are dangerous. It merely happens that some do not have the vindictive, resentful disposition which seems almost part of the disease. And these are satisfied to nurse their delusions as their private affair and are not so apt to break out in resentment. The vast majority, however, are keenly resentful toward their supposed persecutors and suspicious and distrustful towards most every one. Cases of paranoidal dementia-precoc partake of the nature of the two diseases implied in the name and the title pretty well describes the disease.

There are certain borderland cases which seem to be much akin to paranoia. In fact I believe these subjects have inherited the paranoiacal temperament, but withal enough intellectual stability to escape the delusive stages of the disease proper. These unfortunate people are born into an environment to which they cannot peaceably adjust themselves. They are popularly known under several appellations, viz.: cranks, fanatics, extremists, eccentrics, etc. Many geniuses belong to this class of mental freaks. Many of them have done brilliant things in history. They are effective people under certain conditions. However, when they fall into ways evil for them in their peculiar makeup, or when the affective incongruity is so pronounced through the accentuation of some element of the sane temperament, which is their heritage, they not infrequently have to be committed though intellectually sound.

Is Sexual Continence Compatible With Health?

By DR. CHAS. CHASSAIGNAC, New Orleans, La.

Since the creation of this section, many of the most important pathological conditions of the genito-urinary tract have been given consideration in turn, and it seems timely to bring up this year something from the physiological side, a subject relating merely to the function of the sexual organs.

In addition to the theoretical interest attached to the question, I have propounded for discussion and which I shall with you attempt to answer, there is a practical and intensely important end to be attained inasmuch as the solution may serve us in our efforts towards the prevention of disease.

Believing that the mission of the chairman of a section is, besides the selection of a subject, its presentation in such manner as to bring out the opinions or observations of the members of the society, I shall be very brief and merely outline a few propositions which considerable thought and experience have led me to believe to be true.

The ideas entertained among all civilized peoples about the conduct of unmarried females and the mode of life which custom enforces upon them show clearly that our question would be answered in the affirmative at least as far as the gentler sex is concerned; hence, in order to simplify the question it will be understood that we are studying it only in reference to the male human being. It must be understood also that we are considering only ordinary or average individuals, not the exceptional with extraordinary temperament.

In order that there may be no confusion as to the scope of the discussion, let me impress upon you that we are not denying the fact that it is more natural and agreeable for a healthy man to indulge in normal sexual intercourse at reasonable intervals than to abstain from it, but we wish to determine whether, if for good and sufficient reasons a man remains absolutely continent, he can or can not remain in good health and condition notwithstanding.

Neither will we be concerned with the possibility that the attempt to do without sexual congress may lead to the practice of masturbation or any other unnatural act, for the individual committing such acts is no longer continent but is merely substituting an abnormal for a normal means of gratification.

We all know that boys are usually taught by older companions that they can not be manly or healthy if they do not go with women and all practitioners of some experience can testify that such is the common opinion among their male patients or that they are at least in doubt, as is evidenced by their statements or their questions, as the case may be. Is that general impression correct or fallacious is what we should determine as clearly as we can, for there is no doubt that it is responsible for a large proportion of the venereal diseases which sap the strength and virility of our young men. Does the risk they run, with its frequent distressing consequences, constitute the lesser evil, or is it both avoidable and unnecessary?

Search in modern literature reveals three interesting things: there is quite a paucity of information on the subject therein; what exists is chiefly in the more recent publications; and all of the opinions given answer the question in the affirmative, without exception.

Fournier, of Paris, has declared that true education of the young in sexual hygiene, which, among other things, would teach young men that sexual intercourse is not at all necessary for vigorous health, would be the most effective means of preventing venereal disease.

Dr. Wm. L. Holt, addressing the American Society of Sanitary and Moral Prophylaxis, has said: "False ideas on sexual hygiene, and particularly the general belief of young men that sexual intercourse is a necessity for vigorous manhood, are the chief causes of reckless indulgence and the contracting of venereal diseases."

"Physicians," states Dr. Osler, "should be the apostles of continence."

Dr. Prince A. Morrow, among many statements of like nature, has said: "Perhaps the strongest argument for instruction in sexual physiology is that it would correct the conventional view, based upon a perversion of physiologic truths, that incontinence in men is a necessary condition of health. Physiology gives the lie to the 'wild oats' fiction. It clearly teaches what is confirmed by experience, that continence is compatible with the highest physical and mental vigor."

He also quotes Sir James Paget as having said that no man was ever the better for incontinence or the worse for continence, and that licentiousness finds no justification or shadow of support in the teachings of sexual physiology and hygiene.

Dr. W. J. Hardman calls it a medical or physiologic fallacy that continence in sexual life is in any way injurious to him who practices it.

Dr. Henry D. Holton in enumerating what parents should explain includes the fact that continence is not incompatible with health.

Dr. A. E. Carriere, in speaking of what we should tell the public regarding venereal things, says "we must teach that continence is compatible with health".

While dealing with the same subject, Dr. Bransford Lewis calls attention to resolutions declaring continence to be not injurious passed by the German Society for the Prevention of Venereal Diseases, by the Brussels International Congress, by the American Society of Sanitary and Moral Prophylaxis, and by several State medical societies.

Prof. Kovalevski is of the opinion that subjects in good mental and physical condition do not suffer any untoward symptoms from the practice of continence, and quotes von Heller, who tested its effect on himself. The latter at first suffered from headache and malaise, but this was replaced soon by a condition of mental alertness and vigor.

Considerable experience on my part for about twenty years, coupled with careful observation on that point, have convinced me that continence and vigorous health are quite compatible. In fact, I am tempted to go further and say that the more healthy and the nearer the normal is an individual, not only the better he can control his passion, but the less is his condition likely to be disturbed by continence. It is the neurasthenic who is most prone to be upset by an attempted or enforced continence and who, as well, is most given to excess.

Repeatedly have I seen strong young men who sought advice or courted examination on account of an approaching marriage and who, after an explanation of various sexual physiologic facts, remained continent for months without detriment to their physical

state or mental condition, the increased tendency to sexual excitement being counterbalanced by the greater inducements to remain virtuous.

Also have I observed over and over again men who, abstaining from intercourse during long periods of treatment, not only were not upset by the deprivation, but whose continence did not interfere with their general improvement any more than with their local amelioration.

Again, I have known frequently of men who, from being either engrossed in strenuous business enterprises or engaged in arduous physical occupation, would without difficulty or without interference with the proper performance of their duties, remain for long periods absolutely continent.

In addition, I have on many occasions come in contact with men whose wives were either temporarily ill or absent and who, strange as it might seem to some, remained continent and well at the same time.

Widowers, also, often remain continent for a long time, even though in their prime, through affectionate remembrance or respect of the departed one, without the slightest evidence of harm to their physical or mental being.

Besides, we all know that in some universities continence is considered the right thing among the students, and is generally observed by the majority without the least detriment to their physical development or mental activity. In fact, continence is usually enforced upon those who are in training for any sort of physical contest.

Information in line with the facts just mentioned can be gleaned from the habits and customs of even savages. They frequently went on long expeditions without their squaws, especially on such trips as required the greatest physical vigor and mental alertness, not only in order not to be encumbered with the women, but also on account of their belief in the enervating effects of coitus. This is brought out at length by Crowley (quoted by Havelock Ellis) in dealing with the traditional influences making for chastity among savages.

I have noticed only three classes of individuals who are apt to be noticeably disturbed by continence: those who have been in-

dulging in intercourse regularly and who without inhibitory interposition of some physical ailment or mental shock, are suddenly deprived, but the effect in these is only temporary and they can adjust themselves to the new condition, as is evidenced by the gradually diminishing frequency of involuntary nocturnal emissions; again, those who are to a great extent idle or dissipated and who, while they are continent for some probably compulsory reason, do not avoid temptation nor attempt to keep their mind free from impure thoughts; lastly, those whose sexual organs are to a certain degree in a pathologic condition.

From all I have said, I am of the opinion that in a normal, healthy, physically and mentally occupied individual, sexual continence is compatible with health, although moderate indulgence in coitus is admittedly more agreeable and more natural for the fully developed person when there is no adequate reason to prevent the gratifying of this instinct or impulse normally and reasonably.

I am well aware that the contrary opinion is held by many both among the medical men and the laity, and there is no doubt but that we are held responsible to a great extent for the prevalence of this error; but, believing the doctrine that sexual intercourse is necessary to health is fallacious and is a powerful cause of immorality resulting in disease and suffering, I am further of the opinion that the subject is highly worthy of intelligent discussion by you, and that this society should express its honest conviction on the question.

DISCUSSION.

DR. PATTON: I believe I have had exceptional opportunities for observation on this subject. During the early years of my professional life I was stationed at the Mississippi River Quarantine Station, where we often had vessels in detention for ten days or more, and the confidence of many seafaring men who were disturbed by the dread of injury from enforced continence was thrust upon me. I still have a number of those men among my clientele. They are certainly among the most robust and healthy of our race, and while many are licentious, a large number are strictly continent. After many years of observation I have no hesitation in joining Dr. Chassaingnac in maintaining that sexual continence is

entirely compatible with health. It is a common observation that a man engrossed in any serious occupation may go for months without experiencing sexual desire. It is also true that such desire can be kept active by reading and talking and thinking about its gratification, but even then the consequence is discomfort rather than physical injury. If a man will simply go ahead and attend to business without allowing his mind to dwell unduly on sexual matters he will find no trouble in remaining continent indefinitely and need have no fear of being injured by so doing.

DR. HUMMEL: I would like to say a few words on the mental aspects of the subject in question. While I quite agree with Dr. Patton where he maintains that a man who keeps his mind engrossed with clean and wholesome thoughts is practically safe from lapsing into vicious mental habits, I believe that a man who has, from any reason, abstained from sexual congress, and who has not made the proper effort to discipline himself in this regard, is more apt to allow thoughts upon sex matters to crowd into his mind in such profusion that nearly all his conscious moments are filled with reflection upon this kind of thing. And I believe that this condition of affairs is capable of reacting deleteriously upon his mind. It is at least demoralizing. We are all, doubtless, acquainted with men who are fond of rolling under their tongues some salacious joke, and so fond are they of such indulgence that they become disgusting in their mental habits. I do not mean this as an argument against sexual continence. On the contrary, I would wish to be understood to be making a plea for both mental as well as actual continence, as Dr. Patton has done in other words. Also, I realize that I am digressing somewhat from the subject as Dr. Chassignac has presented it, but I trust I may be permitted this brief observation.

DR. DUPAQUIER: This subject deserves attention, the more so that it may help solve the problem of the "venereal peril". In addition to the strong arguments that Dr. Chassignac has produced in favor of sexual continence, I shall give here the opinion of a writer who has done considerable harm to many generations, by setting in attractive garb a picture of bad educational ideas Alexandre Dumas *fils*, who wrote that passionate story of Camille and Armand, the infatuation of a youngster for nothing better than a

prostitute. The writer never disclaimed the genial production; but, in after life, becoming an advocate of sexual continence for the betterment of the physical and mental health of the human race, he wished and expressed the thought that the day will come when the true man shall reach the sacred bonds of matrimony in the same condition of purity as the true woman does, nowadays.

DR. P. E. ARCHINARD: I read an excellent book entitled "Hygiene of Love". I read it in French. It was originally written in Italian. He goes into details in that book. It is a very good book, written for moral purposes. I wish you could all read it. I do not know what became of it; I lent it to some one and he never returned it.

DR. NELKEN: I think we shall all agree with Dr. Chassaignac that continence is perfectly compatible with physical health. An interesting question is whether continence until a man reaches 25 or 26 years—the average age when men marry—is harmful to his sexual health. Kraft Ebing reports one such case where the individual found himself impotent. The Catholic priesthood, the only body of men who sincerely practice sexual restraint, might enlighten us if they would. It would seem fair to assume that prolonged disuse of any function will impair its activity. If we do not use our arm, the muscles wither, and if we constantly use predigested food the digestive glands atrophy.

We must not expect great success in preaching sexual abstinence. After the desire for air, for water, food, and sleep, the sexual desire is the most potent. This is necessarily so, since by the law of race evolution, those who are strongest sexually will procreate the greatest number of offsprings.

It is not fair to compare the sexual impulse of man with that of woman. Kraft Ebing has well said that if woman's sexual desire was as strong as man's, we would be a race of prostitutes.

DR. SEAY: I have had charge of from 125 to 175 men at a time working on the levee in Northern Louisiana. They were continent, but much to my surprise, with regard to the dysentery which they had, they said it was due to the act of rape committed by one man upon another. This caused disease and injury. There is a gentleman here who has charge of the convicts in this State. I learned that this was common among these men. I believe that

caused the death of one of my patients. I could not tell what kept up that disease. I learned that he was being imposed upon and I protected him against the other men. I think it is the duty of the physician in charge of the convicts to protect them.

DR. CHASSAIGNAC (closing): In answer to a question, if a man keeps himself busy and his thoughts free from these subjects, he goes on longer without nocturnal emissions than otherwise. It is a bad thing for a man to give way to frequent and intense sexual excitement without coition, as that will produce disease. My paper is written on the theory that the man intends and wants to remain continent for a good reason. This applies to what Dr. Nelken says as well as what the others say. If a man desires, he can remain continent and be in as good condition when he resumes the use of his organs as when he discontinued their use. I have seen such cases where continence lasted for not only a few months but years, men in whom there was no occasion for an untruth. I do not mean to inculcate the idea that it is not more natural and more agreeable for the individual, under proper conditions to gratify his instinct. It is our instinct, but sometimes we are living an unnatural life and cannot gratify our instinct; for instance, some men do not marry as early as they should. I do not touch on the moral aspect. The point I make is that it is not a necessity. Young men ought to be taught that if they want to remain continent they can do so and remain healthful. Many young men would remain continent but have been told, and frequently by physicians, that it was not possible, or that harm would result. No harm results. Our question is whether it is compatible with health. If we go about it in the right way it is absolutely so.

Malarial Hematuria.

By O. M. PATTERSON, M. D., Bastrop, La.

The subject selected by me for this paper is one of peculiar interest. First, because it is comparatively a new disease, not having come to the notice of the profession of this country until about the year 1860 or 1865. Being a new disease at that time, the treatment was purely experimental and as a consequence fa-

talities were frequent. But, since we have had more experience with the disease, the treatment has been more successful. It is purely of malarial origin and supervenes upon repeated attacks of intermittent or remittent fever. A patient may have frequent attacks of intermittent or remittent fever and then a chill of unusual severity—then set in the symptoms peculiar to this disease. A chill of unusual severity attacks the patient, and the first symptom characteristic of the disease begins. First the passage of bloody urine, the conjunctiva and skin become jaundiced, immediately after the chill passes off the temperature rises from 102 to 105 degrees, nausea and vomiting set in and patient becomes very restless. A quick full pulse at first becoming very weak and easily compressible. The above symptoms continue with variable severity, if it is of the intermittent type, usually in from 24 to 36 hours, the above symptoms lessen and perspiration begins, the pulse gets less frequent, nausea and vomiting is relieved, and fever subsides, urine clears up and unless there is a repetition of the chill, convalescence begins. In the remittent variety the symptom are the same as above described, only there is usually in from 24 to 36 hours a remission, instead of an intermission, and as above stated, there is an amelioration of all the symptoms. This is the usual course, but very often the disease does not pursue this course. Instead of a subsidence of the symptoms, they all continue with varied severity, and last from three to six days if it is to terminate favorably. When there has been considerable hemorrhage from the kidneys and thereby rendering the patient very anemic and weak, and fever continues, and there is a sudden suppression of urine for 24 hours, and delirium and coma supervene, the patient invariably dies.

Treatment.—In regard to the treatment, the first object in view is to get all emunctories acting. To-wit: bowels, skin, kidneys, liver, etc. The most efficient remedy in my hands has been calomel. We give first, a cathartic dose, followed by some saline, and after I get free catharsis, I continue the remedy until I get the dark tarry stools, and suspend and continue as the case may be or as occasion may require. At this stage of the disease turpentine has been found to be very beneficial, as a stimulant and hemostatic and otherwise. For the nausea and vomiting a hypodermic of

morphin answers the purpose in a two-fold way: first, to prevent the chill, second, to prevent nausea and vomiting. Fowler's solution at this time is also a useful remedy, given every four to five hours, and continuing it in increasing or decreasing doses as you may deem advisable, and as the disease advances we should meet symptoms as they arise. This is the treatment I usually adopt or something very similar, but as we know there is no specific treatment for any disease, we must treat every case on its own merits. You will notice that I have not said anything about quinine in the treatment of this disease, as it has been my experience after years of observation I regard it as being a dangerous remedy. Such has been my experience after years of contact with swamp fever, as I am sure it very often aggravates the hemorrhage. The patient being left in a very much weakened and debilitated condition, it is very necessary that they should be given an after treatment and continued for some time. For the two-fold purpose of strengthening and building up your patient, and also to prevent a return of the disease, and to fill the above indications, I would suggest (after the subsidence of the symptoms) the anti-malarial treatment of iron, quinin and strychnin, in tonic doses, together with a change of locality, as there is nearly always a pre-disposition and consequently a return of the disease, if a person remains in a malarial district.

Trachoma.

By W. L. EGAN, M. D., Shreveport, La.

We have no intention of giving you a long paper on this old and trite subject, nor do we expect to introduce to you much, if any, that is new, however much we might like to do so.

The object of this article is to give you my impressions and manner of handling this disease in as concise a form as possible, hoping I may lighten your burden to some degree, for we all know how troublesome it is to handle.

Trachoma is always accompanied with conjunctivitis, and was for a long time considered neglected or badly managed conjunctivitis, and it is only by the very latest writers that it is separated from purulent and miliary ophthalmia.

It seems to have been handed down to us from Egypt as Egyptian ophthalmia. The description of most all the old writers reads something like this:

“Egyptian Ophthalmia—The most violent and troublesome form of this disease is accredited to the effects of vicissitudes of atmosphere, temperature and humidity. A hot wind loaded with particles of sand and the bright piercing light of the sun.”

The above quotation means today, filth, humidity, improper sanitary surroundings and the glare of the electric lamps; dust from the streets loaded with microbes and bites from the pesky mosquito. To the citizens it means malaria, rheumatism, typhoid, and a generally broken down system fit for “treason, strategems” and the doctors await the spoils.

A rapid spread of the disease among crowded and unsanitary communities in badly ventilated schools, filled with pupils from the slums, did lead to the popular belief that it is contagious. Contagious! why to class trachoma contagious is the veriest “tommy rot”. In this Twentieth Century who has not had case after case in one or another large family without further infection?

The doctor’s hoary locks have long since rested peacefully in the grave who has seen an epidemic of trachoma in this country, and yet the U. S. government is still imposing an order excluding emigrants on account of its contagiousness; separating a family from one of its loved ones may be, or severing the ties of love by returning a lovely young lady to a heathen land after she had made the trip to this country to meet her promised husband, who has preceded her to make a home and comforts.

Change of air and scenery with relief from filth and squalor is the very best treatment that can be administered, and yet our country, that boasts of its enlightenment, says: “Sir, back to your filth and oblivion; live there and scratch out your own eyes (for verily that is what they do). Your old heathen doctors said trachoma is contagious and although we now know differently we will have none of you.”

The history of trachoma is a history of bad sanitation; a miasmatic infection and of trachoma as we have it. A broken down system accompanied with a special disease that will change the blood and reduce and impair tissue building. There is no specific

microbe, although some pathologists have found so-called ones, but they cannot be found in every case. After a careful study of the disease I have arrived at the conclusion that trachoma is not a disease, *per se*, but a symptom, a local manifestation which attacks the lids weakened by disease and bad blood.

You had just as well try to introduce scurvy into the midst of the 400 of New York, instead of gout, as to introduce trachoma in an epidemic form. Without filth, bad nourishment or diseased conditions of the system you cannot have trachoma. Exposure to it never produces the disease except under conditions above mentioned. A case never comes under my care that I do not begin a regular search for the cause and in every instance I rely on the constitutional treatment for the cure of my patient. Local astringents are necessary, of course, but with me they are only palliation used to lessen pain, reduce inflammation and the inevitable thickening of the lids caused by granules.

Now and then I encounter a case which has been so long mistreated, in which the granules are so exuberant I have had to apply the blue pencil or a strong solution of nitrate of silver, but in nearly every instance and always after I have my patient on the road to recovery from his constitutional trouble, I use the very mildest astringents and a sol. of nitrate of silver 2 gr. to $\bar{3}$ i. This mild remedy has acted like magic with me in keeping down granulation and relieving pain.

With your permission I will relate briefly three cases which you may call fair examples:

Mr. W. consulted me for eye trouble. Upon examination I readily diagnosed trachoma. Occupation clerk; history syphilis in its tertiary stage. Eyes had been affected two or three times before; never so bad as at present. No other local manifestation of syphilis.

Gave patient iodide of potassium and bichloride, alternating every three or four weeks with protoiodide internally. Bathed eyes frequently with boracic acid solution and applied to lids every other day solution argentic nitrate, 2 grains to $\bar{3}$ i.

Under above treatment eyes soon began to improve and in a few months there was no sign of the disease, but like all syphilitics—get rid of what hurts or he can see and he will stop the treatment,

and every year or two his granules returned, each time to be relieved in the same manner.

Case 2. Miss E, a young lady just budding into womanhood—growing too fast; pale and anemic, with delayed menstruation—consulted me for her eyes. Trachoma was easily diagnosed and she was one of the hardest and worst cases I ever had to treat; not because of the severity of the disease, for there was very little thickening of the lids; no opaque cornea, only granulations; mean and stubborn and constantly returning and had I relied on local treatment, would have been springing up yet.

Proper remedies were prescribed, changed and prescribed again; always with the end in view of building her up, together with good food and outdoor exercise and fresh air. Gradually an improvement was wrought, her menstrual function was regulated, her eyes improved, and I turned out of my office God's masterpiece, a perfect woman; and she is to-day perfect even in her work, for the last time I saw her her eyes were well and bright and she had a babe at her breast.

Case 3. Mr. L. Malaria. This man suffered with malaria but not with chills and fever. Mostly his trouble was rheumatism, inflammatory principally; occasionally it was intermittent fever or lumbago, but whatever the manifestation, it was always severe and left him broken down in health and in an enfeebled condition which required weeks and even months to recuperate, and after one or two of his attacks trachoma came to add to his misery.

Change of air and living, good food, plenty of exercise, no medicine internally, mild astringents and the magic solution applied every other day relieved the trouble.

I will now recapitulate:

Trachoma is not contagious; never epidemic; may be endemic in places where filth and squalor abound.

Is not a disease per se but a local manifestation—symptom. Treated as a symptom is readily cured with mild caustic applications and astringents.

Hypodermic Treatment of Syphilis.

By C. J. GREMILLION, M. D., Alexandria, La.

When we take into consideration the protean manifestations of syphilis and the grave consequences which are liable to manifest themselves at any stage of the disease it is very desirable that we should employ a method of treatment which is speedy in its action, easy in its administration, reliable, and thoroughly under control. I believe in the hypodermatic use of the soluble salts of mercury we have a method which meets all these indications.

From my personal experience I consider the hypodermatic treatment of syphilis the most effective that we possess to-day. The reasons why I say so are because:

1st. It spares the patient's skin and stomach. It is applicable to all patients and all types of the climate.

2d. It is superior and less objectionable to either the internal treatment or inunctions.

3d. It cures with the smallest quantity of mercury.

4th. That you are using a definite dose at a definite interval.

5th. That the injections are painless and not followed by any indurations.

6th. That you have your patient under control.

7th. That he can not give the prescription to anybody else.

8th. That relapses are less frequent under this treatment than any other.

The method dates back to the year 1864, when Scarenzio used it. Dr. Lewin was a great advocate of the treatment and did much to bring it prominent before the profession.

The three classes of preparations of mercury which are used are metallic mercury, insoluble salts of mercury and soluble salts of mercury. Metallic mercury is so unwieldly and so apt to cause abscesses and painful and persistent indurations that it has been practically discarded by the profession. The insoluble preparations are so slow in their actions so liable to cause hard and painful indurations that they are being used less and less from year to year. The most popular of these salts is salicylate of mercury. The salt is suspended in aseptic oil and given in one-half grain dose twice a week. A very good formula is:

Salicylate of mercury, gr. 24.

Liquid of petroleum, one oz. Inject 30 min.

Gray oil, which was introduced to the medical profession by Lang, of Vienna, in 1884, has been used very extensively and very much lauded by its originator. He claims that the absorption of the mercury is very slow and that it can be detected in the tissues years afterwards, in one of his cases three years after the last injection.

Among the soluble salts of mercury bichloride holds the first place. Solutions are made in the strength of $1/12$, $1/8$ and $1/2$ of a grain to ten minims of water and injected into the gluteal region every day, every other day, or once a week, as indications present themselves.

The preparation which I have been using for the last six years has been a 10% solution of biniodide of mercury in aseptic oil. I generally give twenty minims of this solution at one dose and introduce it into the gluteal region. If the case is a severe one and requires speedy action I give this dose daily until I begin to get the constitutional effect of the mercury, i. e., slight soreness of the gums, or until the syphilitic symptoms improve. In cases where it is not necessary to get immediate effect I give this dose only twice a week. This treatment is continued for two months and then stopped for six months, provided no symptoms manifest themselves in this interval.

At the end of this time my patient gets six injections in six weeks and another six months' rest, and so on until the three years are up. This is the course to pursue in cases that have few or no symptoms, but in grave cases it may be necessary to keep the injections twice a week for several months.

In advocating this remedial measure I do not do this at the sacrifice of either the internal or inunction treatment, but in selective cases I think it is the method par excellence. Now the following indications should guide us in selecting this procedure:

1st, Cases of very severe syphilis with tertiary lesions occurring soon after the initial sore; 2d, cerebral and spinal syphilis; 3d, cases where internal treatment has caused stomatitis; 4th, cases of pregnant women who are unable to take mercury internally; 5th, in cases of chancre of the face where we desire to get immediate results; 6th, the persistent syphilitic headache which has proved rebellious to internal and external treatment; 7th, cases of syphilitic iritis; 8th, cases who are desirous of getting concealed treatment.

PRECAUTIONS TO BE OBSERVED IN USING THIS TREATMENT.—

It is necessary that we have a preparation made by a reliable druggist with a sterile solution. The hypodermic syringe should be sterilized before each injection. In our work we have been using a Sub. Q syringe with a needle of medium caliber one and one-eighth of an inch long. The parts should be washed with soap and water and then with alcohol.

The best places to make the injections are in the buttocks in a perpendicular direction to the skin, and from one to one and a half inches deep according to the amount of adipose tissue. It is not necessary to seal the wound with collodion or put a piece of adhesive plaster over the site of injection.

When instituting treatment it is absolutely necessary to examine your patient thoroughly, especially make a chemical and microscopical examination of the urine; because cases with kidney complications are unable to stand this treatment when pushed and are subject to intense mercurial poisoning, sometimes from a very small dose. The following case will illustrate this point:

E. P., colored, age 22, came under our observation on September 14, 1906. Complaint, headache and swelling of the feet. This patient had been treated by us before with internal medication with some improvement. He acquired this trouble four years ago and had never noticed any secondary manifestations, but however has never been in good health since then. Previous to our treatment had been treated a long time by another physician. General appearance: patient of a low stature, well nourished but extremely anemic. Thorax: heart and lungs normal. Abdomen: normal. Urinalysis: sp. gr. 1007, of a clear whitish color; contained 20% albumin. No sugar, globulin test positive; contained hyaline casts, triple phosphates, urates, bacteria and mucus.

The result of the examination showed that the patient had nephritic trouble, but, thinking that the kidney trouble was due to the luetic condition, we decided to give him the hypodermic treatment in hope that we would benefit the diseased organs.

After the first two injections there was some improvement, but subsequently to the fourth I was hurriedly called to see him at his home. He presented all symptoms of an acute pyralism, tongue was very much swollen, even the entire neck, and all the aural

glands were enlarged, secreting a large amount of saliva. He had not excreted any urine for 12 hours.

I gave him hot saline enemata to stimulate the action of the kidneys and ordered kalii chlorate and atropia for the hypersecretion of saliva. Returning some few hours later I found him in a semi-comatose condition, the coma gradually deepened and 36 hours after I was called to see him he died. Unfortunately no autopsy could be had.

This case which came under our observation shows what can be accomplished in syphilitic periostitis when internal treatment had failed.

This patient, white male, aged 33, applied for treatment on March 2, of this year (1907), complaining of intense pain in right shoulder, with a tumor on chest. His family and previous history are good, he is married, the father of one child, 5 years of age. When 20 years of age he contracted syphilis and took internal treatment for two years with an apparent cure until the beginning of this trouble two years ago. At that time he noticed that on taking violent exercise he experienced pain in shoulder, especially at night, and the appearance of the mass on chest. At first he claimed that the pain subsided under internal treatment, but the last two months he has had very little relief and the pain is more marked at the sterno-clavicular region.

G. A. Patient well nourished and developed. Thorax: Heart sounds clear. Lungs: normal. Abdomen: nothing of note.

At the junction of the sternum and clavicle on the right side is visible a hard, round, immovable mass apparently superficial, nearly the size of a man's fist, which is very painful on pressure. Radial vessels pulsate alike. Lymph nodes palpable, especially the epitrochlear and the cervical.

Treatment. He was given 25 m. of the 1 per cent of biniodide every other day for five days, and kalii iododi m. 10 t. i. d., increasing 1 drop at each dose. After giving him three injections the pain had subsided, and after five the mass had nearly disappeared. Thinking that he was well he stopped coming to the office, and in about one month he noticed that the mass was growing larger and that the pain had returned. He again applied for treatment. Now doing well and taking 80 drops of iodide 3 times a day.

This case shows, as I previously said, that this treatment is applicable to all stages of the disease.

Patient, colored, age 31, came to the office complaining of sore on the penis.

Previous history: always healthy. About three weeks ago he noticed a small sore on head of penis and enlarged inguinal glands.

Having been treated by a physician previous to ourselves it was impossible to arrive at a definite diagnosis. We, however, leaned toward a chancroidal infection and treated him for such for four days without any result. We then discontinued our local treatment and gave biniodidi by needle. After two injections marked changes had occurred in the sore, and after three more he was entirely well.

He was told to return to continue treatment, but feeling like most patients feel, that he was cured, he did not do so. Three months following this the secondary symptoms had plainly appeared and responded readily to the hypodermic treatment. This patient is entirely well and is working every day.

This case is exceedingly interesting for it shows how speedy the action of this treatment is.

D. H., colored female, age 18, married, no children. Came at office December 6, 1906. Complaint: exquisite headache of two weeks' standing. This patient had consulted us two months previous to this time with the initial sore which healed under local treatment.

This trouble, "headache" she claimed, started about two weeks ago, especially marked at night. General appearance: patient of a medium build, well developed and nourished. Thorax: nothing abnormal. Abdomen: normal.

Over entire body, especially upon face and forehead, were visible numerous papulosa or condylomata. The lymph nodes were all enlarged and she had a slight rise of evening temperature.

After the first injection of the biniodide the headache was entirely relieved and after five injections the papulosa had nearly disappeared, and after eight injections the skin was perfectly clear.

This case is reported to show the superiority of the hypodermic method over the internal.

L. T., colored female, age 22. Was first seen on April 16, 1907. Complaint: sores on knee and wrist. Family history and personal

history are very indefinite; she is unmarried, and denies any venereal infection.

Present illness: Began four months ago, she noticed a small sore appear on the inner side of knee without any cause; this gradually grew and about two months ago became very painful. She took the internal treatment for a long time without any effect. Two weeks prior to her application she noticed that a similar sore had appeared on the right wrist which was exceedingly painful at night, so much so that at times she was unable to sleep.

General appearance: patient well nourished and developed, of a medium size. Thorax and abdomen: negative. Lymph nodes enlarged over entire body. On dorsal side of right wrist is visible a large circumscribed flat mass which excretes a clear fluid. On internal aspect of right knee above condyle there was a large ulcer with hard, indurated edges, both were very painful on pressure.

Treatment: She was given 25 m. of the red iodide every other day for eight days, at the end of that time the excretion from the ulcer at the wrist had ceased, and the one on the knee was very much better. Thus far she has had nine injections. She is doing fine. Since the third injection she has experienced no pain at all.

I report this case because it was of great interest to me, knowing that it would likewise interest you all.

W. R., colored male, aged 17. Came for treatment on August 27 of last year. His complaint was "Pocks," which he undoubtedly had. He claimed to have acquired this one month before that time.

He had the initial sore, and a diffuse macular eruption on hands and neck, over trunk and lower extremities they were bilateral but not as numerous as over forearm, hands and neck. On corona (left) of penis was the initial sore. He had a mucous patch on side of tongue near end. He had temperature 99.2 and had a feeling of general malaise.

This patient was given the regular dose of the red iodide, 20 m. every day instead of every other day. After 48 hours (two injections) there were marked changes, the macules were beginning to fade, and in some places were entirely gone. He was then given the same dose every other day for eight doses and the patient's skin was clear, as before he contracted the trouble. Had occasion to see him several times since we gave him the treatment and he

is well; however, about three weeks ago he applied for advise with a gonorrheal infection.

This case will illustrate the good effects in late tertiary lesions.

C. D., white male, 56 years of age, bookkeeper. Previous history shows that he was healthy up to 35 years of age when he contracted syphilis, from which he was treated and apparently cured up to 11 years ago, when he developed a large gumma on his back, which was removed. He again enjoyed good health until two months ago, when he noticed a small growth at the junction of the lumbar and sacral vertebræ in the median line. It gradually grew larger, and when it attained the size of the fist it broke down and suppurated, emitting a very foul odor, for which he consulted me in the latter part of 1903. I gave him 11 injections during 6 weeks, mostly around the mass. In that time it healed entirely and he has shown no symptoms of syphilis since.

[CONCLUDES 1907 PROCEEDINGS.]

Orleans Parish Medical Society Proceedings.

President, DR. AMÉDÉE GRANGER.

Secretary, DR. E. M. HUMMEL.

141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. E. M. HUMMEL, Chairman.
DR. HOMER DUPUY and DR. S. K. SIMON.

MEETING OF FEBRUARY 22, 1908 (*Continued*).

DISCUSSION OF DR. FENNER'S PAPER
ON INFANTILE SCURVY.

DR. PARHAM: I would like to ask Dr. Fenner if cases sometimes showing Henoch's purpura and similar symptoms, might not have scurvy as a basis. I have observed such cases with a tendency to calculus formation, showing purpuric spots and joint pains. I am glad Dr. Fenner has called attention to this condition, which I am convinced is frequently overlooked. I further think the doctor is to be congratulated on the happy ending of the cases presented.

DR. GRANER: I saw two cases of scurvy several years ago, in one of which the child had been fed constantly on sterilized milk. The symptoms were intestinal disturbances, temperature and anemia. The condition cleared up with the free administration of orange juice. I think that sterilized milk is a frequent cause of infantile scurvy, especially in children nine or ten months of age.

DR. CHAMBERLAIN, U. S. A. (a guest of the Society:) I would like to report the "*Case of a Child Sixteen Months Old, Who Had Never Walked Alone.*" No evidence of pain or sensitiveness was noticed. At first the child could stand, but later could not. Then it could crawl, but subsequently it failed to do even this, collapsing when raised to its knees. These symptoms developed gradually during about five weeks. There were no gum symptoms, nor was there any pain when the legs were squeezed or moved. All the time the child was happy and cheerful. Administration of orange juice caused prompt disappearance of the symptoms and the child was greatly improved in four days, and standing again in one week.

DR. FENNER (in closing): I must confess that I have not a perfect knowledge of Henoch's purpura, but I am inclined to believe that cases presenting such symptoms are scorbutic in origin. The main purpose of my paper was to call attention to this condition and its symptomatology. Often the real condition is overlooked and children suffering from pseudo-paralysis and supposed rheumatic symptoms, are treated with electricity and swathed in bandages and lotions, only to recover after having the juice of a single orange. It is the opinion of some authorities that intestinal intoxication is a cause of scurvy; however, this question is not settled. At any rate, when the diagnosis of scurvy is established, prompt relief is always afforded by the administration of orange juice.

[Discussions of papers of March meetings to appear at conclusion of Symposium on Tuberculosis.]

N. O. Medical and Surgical Journal

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

The State Medical Society Meeting.

The State Society meets in Alexandria May 13, 14 and 15, 1908. We have already called attention to the fact that the local profession at the place of meeting has used every effort to provide for the comfort of those in attendance. The organization of the State Society depends upon the interests which attract the individual member, and these are to be weighed by the scope of a program, the social relationship of the members, and by the cohesiveness of the body politic in the Society itself.

The State Society meetings are made up of men who attend them for these reasons and others peculiar to the particular group. An attractive program with papers dealing with subjects of current interest and presented by men qualified to review current opinion and achievement is bound to be the chief element of attraction at any association meeting. The purposes of organization, however, are far more subserved by the opportunity of intellectual intercourse outside of the convention hall, and it is the fraternal hand-clasp and the exchange of ideas on outside topics that cement the friendship which moves on to the accomplishment of any concerted action.

The State Medical Society of Louisiana has accomplished a great deal during the past ten or twelve years, but there are still matters of vital interest to the profession which need the attention of the whole body of the Society. Our State Medical Examining Board has repeatedly confessed its weakness in a successful attack upon prevailing evil practises in the State. It has announced its lack of successful effort on the ground that the profession generally is apathetic and unwilling to take a sincere initiative. The medical law of the State may need revision for the final protection of the profession itself, not to mention the public.

It is the duty of the State Medical Society to frame resolutions and to impress their spirit upon State legislators in order that all moves in the direction of sanitation, public hygiene, morality as it affects the medical side, should be made clear to those who have the authority of the law to promulgate and execute enactments necessary to their control.

The membership of the State Medical Society should include every reputable practitioner in the State, in order that his individual interest may be conserved in the machinery of a large body able to wield clean political force to the end that it may in time demand those things which in the past it has had to beg.

After all of these reasons, and more that might be added, we now urge all members of the State Society to attend the meeting at Alexandria; to encourage the councillors and the executive officers of the Society by their presence at the meeting in order that when the new administration assumes its functions it may begin where their most excellent predecessors have left off with the idea of continuing along the high ideals and purposes which now are emblazoned on the standard of our State body.

The Chaille Jubilee.

It is pleasing to record the fact that the Carnegie Board's recognition of the long services of Prof. Stanford E. Chaille in his association with the University of Louisiana, now the Tulane University of Louisiana, has received the endorsement of educators and of the medical press throughout the country.

It is with all the more reason, then, that we again call attention to the proposed Jubilee exercises which are to take place in New Orleans on the 19th of May. All Alumni of the Tulane Medical Department have been sent a circular announcement, but the profession generally will be interested to know that on this occasion appropriate addresses will be delivered by men qualified to chronicle the relation of Dr. Chaille, not only to medical education, but to sanitation and to the life of citizenship and of the soldier. The JOURNAL anticipates the privilege of reporting the occasion with pleasure and with pride, for so many of our readers have felt the stern and kindly hand of encouragement, praise and criticism of this great teacher that any honor which may be paid to him must be shared by all of us.

Miscellany.

Parisian Medical Gossip.

Translated by DR. T. C. MINOR, Cincinnati, Ohio.

DOCTOR EUGENE SUE AND HIS MEDICAL ANCESTORS.—This is not the place to discuss the socialistic theories advanced by Doctor Sue, a man who inoculated false ideas to the people through his really great novels. Let us only cite, for instance, such works as "The Wandering Jew," "The Seven Capital Sins," "Mysteries of the People," and "The Mysteries of Paris." It was in the latter romance that he tells of the grand Duchesse de Geroldstein, that is certainly less gay than those of Halevy, Meilhac and Offenbach. Before speaking of Doctor Sue, let us briefly mention his ancestors, who were all distinguished physicians. His family was originally from Provence. His great-grandfather was Professor of Legal Medicine and Medical Librarian of Paris. He left some medical works, but no fortune.

His grandfather was a much less learned physician, but made a fortune and indulged in all the follies of Parisian opulence. He was Professor of Anatomy to the Paris Faculty of Medicine, and surgeon to the *Hôpital de la Charite*. He was Professor to the "School of Fine Arts", and household surgeon to Louis XVI.

Dr. Jean Joseph Sue, the father of Dr. Eugene Sue, inherited the chair of anatomy, and was named surgeon to the imperial guard by Napoleon, and later on carried the good graces of Louis XVIII, who employed him personally in his household in 1817. He was a surgeon to Massena and several other marshalls of the Empire. He was the intimate medical adviser and close friend of Madam de Beauharnais when she sat with Napoleon on the imperial throne.

The Empress Josephine and Prince Eugene Beauharnais were godmother and godfather of Eugene Sue when the future romancer was baptized in Paris on January 1, 1801. The Empress held the infant Eugene Sue in her own arms at the baptismal font.

His father, from the start, destined Eugene Sue for the medical profession. At college he did not shine brightly as a student, and together with his close friend, Adolphe Adam and Ferdinand Dangle, made life a burden to their professors by their wild

escapades. He left college not very well equipped, but thanks to his family's money and influence, took part of his father's paying practice and acted as his medical assistant.

There he made the acquaintance of the famous future Doctor Veron, who was the fourth of the gay band of literary roisterers and high livers. But Eugene Sue was lavish with his money and soon fell into the hands of usurers. So his father sent him away, securing him a medical position in the expedition sent out to the relief of Ferdinand VII. Here he was an ambulance surgeon, and was made a major on the staff of the Duke d' Angouleme. In the campaign he assisted at the siege of Cadiz and the captures of Trocadero and Tasaffa, as well as other Spanish battles, and, after the campaign was over returned to Paris. He then went to Greece and assisted at the battle of Navarin, but his father dying, he flung away his surgical implements and took up his pen, that he loved much better.

His literary beginnings were poor, and wicked verses were inculcated in Paris by his numerous enemies. He was called *Beau Sue* and *Fat Sue* by reason of his brilliant conquests over women.

*"Les humains, par le Docteur Sue
En detail furent occis;
Mais en masse, son bils les tue,
Par ses ecrits."*

This was the mocking quatrain that was sung by the gay Parisians in mockery of the young doctor. About this time he performed his last surgical operation. One of his best and most intimate friends was the famous Romien, the magician. One day when the two had eaten together and taken too much wine, they staggered out of a cafe, and Romien, making a misstep, fell and injured his leg. As a surgeon Doctor Sue carried his friend home and went to work to repair the injury. He sat at Romien's bedside all the night. It must have been a touching sight to see these two much jagged friends together. "Ah! my dearest friend!" Romien kept saying.

At dawn next day the doctor arose to again dress his dear Romien's injured limb. Great surprise! Loud was the laughter on the part of both the magician and Sue. The doctor had set the right leg when it was the left leg that had been injured. However,

the injured man recovered, but the last of an eminent line of surgeons concluded it was time for him to retire from practice when he could not tell an injured limb from a whole one. From thence on Doctor Sue contented himself with the publication of the "*Constitutionnel*", that was owned by his literary friend, Dr. Veron. In this journal he published "The Wandering Jew" and the "Seven Capital Sins". In this latter romance the chapter on "Gourmandizing," a picture of Veron is easily recognized, and the latter was not willing to continue to pay Sue \$20,000, the agreed contract price for the work, for the satire. Doctor Sue had a fourteen years' engagement with Veron at 100,000 francs (\$20,000) a year for his literary reveries. The romance was finally finished in *Le Siecle*, another newspaper.

We must own that these two young doctors made more out of their literature than from their medical practice.

Eugene Sue went into politics. He was elected as a Socialist in 1851.

History ever repeats itself.

French doctors who fail in practice are ever to be found as Socialists; this is the lever on which they elevate themselves into the ministry and the French Cabinet.

The elect have the usufruct and the popular applause, the voters catch the whip and eat the bread of poverty. Conclusion? ? ?

MEDICAL EPITAPHS.—Doctor A. Cheveau continues his medico-literary arrays to the "*Journal de Medecine de Paris*". In a late number of that ever interesting paper he dwells on the "*Satirical Poems Against Physicians*."

"It is necessary to laugh at what has been said in poetry in attacks on our profession," observes Cheveau. "Our task is so peculiar that we cannot escape this tribulation."

Hippocrates and Galen are assuredly our most esteemed confrères. Yet, while they shine in medical light they were far from merry men. Modern Hygeia amused us in the earlier ages, and is about as attractive as the fathers of medicine. But to only go back to the 17th century we find much satirical poetry on tombstones relative to doctors; medical epitaphs, so to speak. Who was the unknown author who inscribed over a physician,

"*Hac sub humo, per quem tot Jacuere, Jacet.*"

Who will not smile to read in a high voice of the Infallible Remedy?

“Calypso pleaded her destiny,
In that she was immortal,
But she passed into a doctor’s hands
And went to Death’s dark portal.”

Or to that quatrain necrological of Delorme

“Doctor Scribet, of rheumatism died.
He died. His age was thirty years.
He was the author of an excellent work
Entitled, ‘The Art of Living Long’.”

Capelle wrote a still better epitaph on his “Obliging Doctor”:

“Come quickly, good Doctor Servais:
The suffering patient cried.
As for Doctor he sent;
The Doctor he went
And the patient quickly died.”

And so continues Doctor Cheveau with no end to his pithy medical epitaphs that are amusing literary curiosities.

THE NATURE DOCTORS OF NORMANDY.—The provinces of France contain almost all the prodigious monographs that inspired the immortal Balzac. Yet, when we penetrate under the mysterious and really unstudied corners of popular medicine we find some things worthy of attention. We are astonished even when Flaubert brings out such a curious study as his “*Bouvard et Peuchet*,” with its many grotesque sides and ridiculous customs of charlatans. Ah! these rural quacks of Normandy, they are legion, sorcerers who cure by strange rites, prayers, topical remedies, mixtures of herbs cooked on certain hours of certain nights at the full or the wane of the moon. These Normand peasants have faith in their nature doctors, and no use for the men with a University of Paris degree. Bone setters and water doctors are implicitly relied on. The bone setters adjust fractured limbs. In every hundred cases of accidental fracture the real surgeon is called ten times, the rural bone setter ninety times. Naturally, the bone setter scoffs at any knowledge of anatomy. These bone setters acquire a certain skill, and succeed well in the majority of their cases.

The water doctor, found in Germany, too—“*wasser arzt*”—carries around bottles for urine and makes the peasants believe in his powers as a diagnostician. He prescribes herb teas and also that really efficacious diuretic, the infusion of sheep’s dung.

Then, too, there are dream doctors, who diagnose maladies by vision. When one calls on them they first collect their fee, then fall into a trance—*no fee, no trance*. One of these Paris dream doctors enjoys an enormous paying practice. The seventh son of the seventh son is also in evidence in France as a curer of scrofula. French corn doctors abound. They cure corns by burying them. Taking it all in all, Continental Europe is very tolerant of all medical fads, and the regular doctor has to compete with the most illiterate set of scamps that ever went unhung. Liberty to practice any cure is the universal rule. In the United States many restrictions are placed on medical practice, and the educated man is largely safeguarded by the State—even down to the absurd point that a diploma to practice in one State gives no right to practice in another without an additional State Board examination, which is the acme of absurdity, for a diploma in one State should give the right to practice in all.

Miscellaneous.

IMMUNITY TO TUBERCULOSIS.—Dr. G. Fisac, in *La Salud Publica*, brings new data in support of his theory of the immunity of plasterers and lime-burners to tuberculosis. The compounds of lime continue to enjoy prestige as antitubercular agents. Recently, Ferrier, with recalcification by the digestive tract, and Semprum asserting that he obtains it in the cells themselves by the injection of his “anti-pneumokochina” (a mixture of a mordant which, hydrated with alkalis, is transformed into a sulphocondroitie ether, and of formiate of lime associated with albumen), show that the idea of imitating the process of healing by calcification is making headway. Men who work in lime-kilns and plaster possess this immunity. Patients should be so placed that they can enjoy the benefits of lime impregnation.—*Gazette Médicale de Paris*.

A. MCS.

EXALGIN IN THE TREATMENT OF CHOREA.—After studying the nature, probable anatomical seat, and the pathogeny of chorea, Dr. Imerio Monteverdi (in *Gazzetta degli ospedali e delle cliniche*) gives the results of the treatment of this disease with exalgin.

Exalgin, being analgesic and antiseptic, is absolutely indicated in a neurosis of toxic and infectious origin like chorea.

The best mode of administration is by means of broken doses of an alcoholic solution. In order to avoid the accidents of intoxication or phenomena of intolerance, it is well to habituate the organism gradually by progressively increasing doses, until the choreic movements are controlled.

Thus administered, the action of exalgin is always rapid, efficacious, and, in comparison with the bromides, antipyrin, and arsenic, it appreciably shortens the duration of the disease. Its favorable effects, indeed, show themselves from the earliest doses, and sometimes the choreic movements are diminished after the second, third or fourth day of treatment. This beneficial action is also seen in cases that have resisted other forms of treatment.—

Gazette des Hopitaux

A. MCS.

Louisiana State Medical Society Notes.

In Charge of the Publication Committee,
Dr. P. L. Thibaut, Chairman; Drs. Homer Dupuy and Carroll W. Allen.

OFFICIAL PROGRAM

OF THE TWENTY-NINTH ANNUAL SESSION TO BE HELD AT ALEX-
ANDRIA, LA., MAY 12, 13, 14, 1908.

FIRST DAY, TUESDAY, MAY 12.

MORNING SESSION, 9:30 A. M. TO 1 P. M.

Call to Order by the President.

Invocation by Rev. Father L. Menard, of Alexandria.

Address of Welcome by Dr. G. M. G. Stafford, President Rapides
Parish Medical Society.

Report of Committee on Arrangement.

Roll Call.

Reading of Minutes of 1907 Meeting.

Reports of Officers:

President.

Vice-Presidents.

Secretary.

Treasurer.

Report of Chairman of Council.

Reports of other Councillors.

Dropping Delinquent Members from the Roll.

Election of Applicants from Unorganized Parishes.

Reading of List of Component Societies in Good Standing.

Reports of Standing Committees:

On Scientific Work.

On Public Policy and Legislation.

On Publication.

Report of Special Committees:

On Revision of Program.

On Cancer of Uterus.

On Conference with Bar Association Relative to Expert
Testimony.

On Medical Education.

New Business.

Adjournment.

ENTERTAINMENT.

Lunch to all members of the Society by the Ladies of Alexandria,
at the Rapides Club, 1 to 2:30 P. M.

AFTERNOON SESSION, 2:30 TO 5:30.

SECTION ON SANITARY SCIENCE AND QUARANTINE—Chairman,
Dr. Clifford H. Irion, New Orleans.

Subject: "*The Economic Relation of the Physician to the Sanitary Interests of the State.*"

To open discussion: Drs. F. R. Bernard, Lake Providence, and
J. L. Scales, Alden Bridge.

"*Reasons Why Louisiana Should Have a Sanitarium for the Care of the Poor Consumptive,*" by Dr. L. Lazaro, Washington.

SECTION ON MARITIME AND INLAND SANITATION: Sub-Section—
Chairman, Dr. G. W. Gaines, Tallulah.

SECTION ON X-RAY AND ELECTRO-THERAPEUTICS—Chairman,
Dr. S. C. Barrow, Shreveport.

Subject: "*Some Therapeutic Uses of the X-Ray.*"

SECTION ON BACTERIOLOGY—Chairman, Dr. C. C. Bass, New Orleans.

Subject: "*Bacteriological Diagnosis.*"

"*The Bacteriological Diagnosis of Diphtheria,*" by Dr. John J. Archinard, New Orleans.

"*Simple Microscopic Typhoid Agglutination Test,*" by Dr. C. C. Bass, New Orleans.

"*The Spirocheta Pallida,*" by Dr. J. D. Weis, New Orleans.

"*The Gonococcus,*" by Dr. Joseph Hume, New Orleans.

SECTION ON MEDICAL JURISPRUDENCE—Chairman, Dr. H. L. Ballowe, Buras.

Subject: "*Shall the Average Country Practitioner Testify Before Our Juries as an Expert?*"

SECTION ON OTOLOGY—Chairman, Dr. R. F. Harrell, Alexandria.

Subject: "*Acute Inflammatory Infections of the External Ear, with Special Reference to Their Differential Diagnosis from Middle Ear Affections, and Treatment.*"

"*Further Observations on the Nasal Treatment of Spasmodic Asthma,*" by Dr. Gordon King, New Orleans.

"*Antidiphtheritic Serum Medication in Post-Diphtheritic Paralysis,*" by Dr. Homer Dupuy, New Orleans.

EVENING SESSION, 8 O'CLOCK.

SECTION ON NEUROLOGY—Chairman, Dr. E. M. Hummel, New Orleans.

Subject: "*The Symptoms and Pathology of Multiple Sclerosis.*"

SECTION ON ORAL SURGERY—Chairman, Dr. S. A. Ayo, Bowie.

SECTION ON ANATOMY AND PHYSIOLOGY—Chairman, Dr. J. G. Martin, Lake Charles.

Subject: "*The Anatomy and Physiology of the Thyroid Gland.*"

To open discussion: Drs. T. H. Watkins, Lake Charles, and T. R. Sartor, Oberlin.

SECTION ON OPHTHALMOLOGY—Chairman, Dr. J. A. Caruthers, Baton Rouge.

Subject: "*A Plea for the Examination of the Eyes of School Children.*"

"*The Uses of Dionin in Diseases of the Eye,*" by Dr. E. A. Robin, New Orleans.

SECTION ON DERMATOLOGY—Chairman, Dr. I. J. Newton, Monroe.

Subject: *"Practical Points in the Diagnosis and Treatment of Skin Diseases."*

SECTION ON OBSTETRICS AND GYNECOLOGY—Chairman, Dr. C. Jeff Miller, New Orleans.

Subject: *"The Surgical Treatment of Puerperal Infection."*

"Ectopic Gestation, with Special Reference to the Propriety of Deferring Operation in Special Cases," by Dr. S. M. D. Clark, New Orleans.

"Operative Treatment of Vesico-Vaginal Fistulæ," by Dr. E. Denegre Martin, New Orleans.

"Anesthetics in Labor; Their Value to Both Physician and Mother," by Dr. A. C. King, New Orleans.

"A Plea for Surgical Diagnosis by the General Practitioner, with a Report of Two Cases of Ruptured Tubal Pregnancy," by Dr. Thomas Ragan, Ruston.

"The Cause and the Treatment of Injuries to the Pelvic Floor," by Dr. L. Perrilliat, New Orleans.

Adjournment.

SECOND DAY, WEDNESDAY, MAY 13.

MORNING SESSION, 9:30 A. M. TO 1 P. M.

SECTION ON DISEASES OF CHILDREN—Chairman, Dr. R. H. Blackman, Monroe.

Subject: *"Symposium on Acute Nephritis in Children."*

"Etiology," by Drs. R. H. Blackman, Monroe, and C. P. Gray, West Monroe.

"Diagnosis," by Drs. S. L. White, Ruston, and G. M. Snelling, Monroe.

"Treatment," by Drs. C. W. Benson, Monroe, and O. M. Patterson, Bastrop.

SECTION ON GENERAL MEDICINE—Chairman, Dr. J. B. Elliott, Jr., New Orleans.

Subject: *"Symposium on Nephritis."*

"Pathology and Diagnosis of Nephritis," by Dr. J. D. Weis, New Orleans.

"Physiology and Pharmacology of Nephritis," by Dr. J. T. Halsey, New Orleans.

"Arterio-Sclerosis and Nephritis," by Dr. Frank Watson, New Orleans.

"Treatment of Nephritis," by Dr. J. B. Elliott, Jr., New Orleans.

"The Nervous and Mental Symptoms of Nephritis," by Dr. Roy M. Van Wart, New Orleans.

"A Case of Angio-Neurosis of the Lower Extremities," by Dr. A. E. Fossier, New Orleans.

"Chronic Sygmoiditis; Report of Two Cases," by Dr. J. A. Storck, New Orleans.

"The Amebic Dysentery and Its Prevalence in Louisiana," by Dr. Sidney K. Simon, New Orleans.

"Intestinal Parasites, with Special Reference to Strangyloides Intestinalis; Report of Cases," by Dr. Allan Eustis, Abbeville.

"A Case of Purpura Hemorrhagica," by Dr. F. A. Larue, New Orleans.

"Gonorrheal Rheumatism," by Dr. W. E. Parker, Hot Springs, Ark.

"The Recognition of Tuberculous Meningitis," by Dr. W. W. Butterworth, New Orleans.

Adjournment.

ENTERTAINMENT.

All members are invited to a Buffet Lunch at the Louisiana Hospital for the Insane, at 1 P. M., in Pineville.

Special train at Valley Depot, Third and Carson streets.

AFTERNOON SESSION, 2:30 TO 5.

SECTION ON SURGERY—Chairman, Dr. J. L. Wilson, Alexandria.

Subject: *"The Importance of Surgical Intervention in Continued Lesions of Typhoid Fever."*

"Carcinoma of the Liver; Operation; No Return," by Dr. J. B. Hargrove, Natchitoches.

"Report of a Case of Jacksonian Epilepsy; Operation; Removal of Bone Spiculum from Fissure of Rolando," by Drs. P. E. Archinard, L. L. Cazenavette and Hermann B. Gessner, New Orleans.

"Diagnosis and Treatment of Intussusception; Report of Two Cases," by Dr. C. J. Gremillion, Alexandria.

"Operative Treatment of Bright's Disease; Report of Cases," by Dr. W. T. Richards, New Orleans.

"Operative Treatment of Gastric Ulcer; With Report of Cases," by W. T. Richards New Orleans.

"The Volkman Step Operation in Ununited Fracture of Leg, and Vicious Union," by Dr. Carroll W. Allen, New Orleans.

"The Treatment of Flat-Foot," by Edward S. Hatch, New Orleans.

"Cuneiform Resection of Knee for Ankylosis," by Dr. F. A. Larue, New Orleans.

"The Importance of the Examination of the Urine for Tubercle Bacilli, with Presentation of a Specimen of Tuberculous Ureter showing Calculi in Situ," by Dr. F. W. Parham, New Orleans.

"The Uses of the Pezzer Umbrella Catheter in Surgery," by Dr. F. W. Parham, New Orleans.

"Some Interesting and Instructive Bone and Joint Cases," by Dr. John F. Oechsner, New Orleans.

"Endaneurysmorraphy on the Posterior Tibial," by Dr. William M. Perkins, New Orleans.

"Traumatic Aneurysm and Arterial Varix," by Dr. William M. Perkins, New Orleans.

Adjournment.

EVENING SESSION, 8 O'CLOCK.

(To which the Public is Invited.)

Annual Address by the President, Dr. Oscar Dowling, Shreveport.

Address by the Annual Orator, Hon. Robert A. Hunter, of Alexandria.

Adjournment.

THIRD DAY, THURSDAY, MAY 14.

MORNING SESSION, 9:30 A. M. TO 1 P. M.

Reading of Minutes.

Report of Nominating Committee.

Election of Officers.

Selection of Place for 1909 Meeting.

Election of Nominees for State Board of Medical Examiners.

SECTION ON GENITO-URINARY DISEASES—Chairman, Dr. Frank Chalaron, New Orleans.

Subject: "*Gleet; Its Causes.*"

To open discussion: Dr. S. P. Delaup, New Orleans.

"*An Unusual Case of Infection of the Genito-Urinary Tract, Apparently not Amenable to Vaccine Treatment,*" by Drs. Carroll W. Allen and C. C. Bass, New Orleans.

SECTION ON MATERIA MEDICA AND THERAPEUTICS—Chairman, Dr. J. B. Guthrie, New Orleans.

Subject: "*A Discussion of the Action of Certain Drugs on the Blood Vessels.*"

"*Hydrotherapy and Its Uses by the Family Practitioner,*" by Dr. Louis G. LeBeuf, New Orleans.

AFTERNOON SESSION, 2:30 TO 5:30.

Unfinished Business.

New Business.

Report of State Board of Medical Examiners.

Discussion of Legislative Matters.

ADJOURNMENT OF 1908 MEETING.

ENTERTAINMENT.

The *Registered* Visiting Members will be entertained by the Rapides Parish Medical Society at the Annual Banquet, at 8 p. m.

TRANSPORTATION.

A rate of *one fare, plus 25 cents* has been secured from all railroads. This should bring a record-breaking attendance to the metropolis of Central Louisiana.

IMPORTANT NOTICE: In buying your ticket, remember to get a certificate receipt. *Be sure to ask the ticket agent for this.*

SOCIETY MEETINGS.

THE AVOYELLES PARISH MEDICAL SOCIETY met at Cottonport Thursday night, April 9th, with the following members present: Drs. Tarleton, Fox, Kiblinger, De Nux, S. J. Couvillion, Walter Couvillion, Saucier, Jeansonne, Bordelon, Barbin, Roy, Porter, Plauche, B. J. Lemoine, S. D. Lemoine.

Subject for discussion was "*Pneumonia in Children.*" The essayist was S. J. Couvillion, and the discussion opened by G. R. Fox and also by the physicians present. In the absence of Dr. R. G. Ducote, Dr. B. J. Lemoine acted as secretary. Dr. Merrick Saucier related and reported a case of tetanus. Dr. G. R. Fox reported a case of vicarious menstruation and Dr. P. Jeansonne reported a case of amputation of the head of the humerus.

Dr. Brahie of Plaquemine was unanimously elected a member of the Society.

Resolved by S. D. Porter that it is the sense of this society that no member of this society shall solicit practice or do contract practice. This was seconded by Y. A. Roy.

Resolved by E. De Nux that the following members be appointed to meet in Mansard April 25th: Drs. Fox, Jeansonne, DeNux, Barbin, Roy, Regard and Drauin for the Good Road Convention.

THE BI-PARISH MEDICAL SOCIETY (Red River and Natchitoches parishes) held its regular meeting at Coushatta, La., April 8, 1908, and the following answered to roll call: Drs. P. E. Bechet, W. W. Teer, W. N. Huggins, E. W. Breazeale, J. T. Keator, C. E. Edgerton, Z. T. Gallion, W. A. Boyleston.

The minutes of the last meeting read and adopted. On motion, Mrs. Fred Ashley Wilson, a delegate from the Health Conference, was invited to address the meeting on Sanitation. On motion of Dr. C. E. Edgerton and duly seconded, a resolution of thanks was tendered Mrs. Wilson.

On motion, duly seconded, the following resolution was adopted:

WHEREAS, the common housefly, mosquito, flea, and other like pests, have been proven to be a source of danger to human beings by their carrying of and inoculating individuals with germs of various infectious and contagious diseases, and not being only carriers of disease-producing germs, but a nuisance and annoyance to the human race, this Society offers to you, as a suggestion, as

outlined at the Health Conference held in Alexandria, that you pass resolutions and laws governing your town looking to the extermination of these various pests; and,

WHEREAS, we, as a body of physicians, ever ready to promote and further the health of our community, place our services at your disposal looking to the fulfilment of the above suggestions; and,

WHEREAS, we find there are no more self-sacrificing, earnest, conscientious, and devoted individuals in any community than the ladies, we respectfully request you to give these women an opportunity, and appoint a committee from your body soliciting their aid in this work.

A paper read by Dr. P. E. Bechet, "A Plea for the Microscopical Examination of the Cervix Uteri for Early Diagnosis of Carcinoma," precipitated discussions by Drs. Huggins, Edgerton and Gallion; and the meeting then adjourned for recess to re-convene at 2:30 p. m.

AFTERNOON SESSION.—Report of committee on "Illegal Practice of Medicine" received and instructed to again report at the next meeting, and secure names of witnesses against an illegal practitioner, and have same forwarded to the district attorney for prosecution.

Report of committee on Tri-Parish Medical Society received, and committee discharged.

Resolution adopted that hereafter this society shall convene at 10:30 a. m. at each of its meeting places.

The following were elected to serve as officers for the ensuing term: Dr. Z. T. Gallion, president; Dr. C. E. Edgerton, first vice president; Dr. P. E. Bechet, second vice president; Dr. E. W. Breazeale, secretary and treasurer.

Applications for membership.—Drs. W. N. Huggins and W. W. Burdette were unanimously elected.

The following were appointed to read and discuss papers at the next meeting: "Practice," paper by Drs. C. E. Edgerton and J. S. Stephens; Discussion, Drs. W. N. Huggins and J. T. Keator. "Surgery," paper by Drs. W. W. Teer and J. B. Hargrove; Discussion, Drs. P. E. Bechet and W. W. Burdette. "Gynecology," papers by Drs. W. A. Boyleston and Jos. Bath; Discussion, Drs. O. C. Teagle and J. B. Pratt.

There being no further business the meeting adjourned to convene in Natchitoches on Wednesday, Dec. 9, 1908.

(Signed)

E. W. BREAZALE,
Secretary and Treasurer.

Medical News Items.

DIPHTHERIA ANTITOXIN FREE.—The Eye, Ear, Nose and Throat Hospital announces that they are ready to administer the fund of the Antitoxin Commission and to supply antitoxin free to all persons who are unable to pay for same. In order that this object may be accomplished justly, rules have been formulated governing this supply:

1st. Antitoxin will be dispensed only on the order of a reputable physician who will write on the order that the patient, or parents, or guardians, are unable to pay for same.

2d. Antitoxin must be called for at the Administration Building, No. 165 Elk Place.

3d. The name, address, sex, color, and age of the patient must be given either on the physician's order or by the person obtaining the antitoxin.

4th. A report of all patients for whom antitoxin is dispensed will be sent to the City Board of Health, with whom this Hospital desires to co-operate.

5th. For the present, antitoxin will be furnished only for therapeutic use and not as a prophylactic.

6th. The Hospital will be pleased to receive from physicians, for its records, reports of the effects of the antitoxin furnished.

7th. The City Board of Health will be requested to inform us of the final result of cases reported by this Hospital.

The kind co-operation of the medical profession is earnestly requested in order that the greatest good may follow for the largest number of the worthy poor.

THE ALEXANDRIA HEALTH CONFERENCE.—The third annual conference of the health officers of Louisiana met in Alexandria March 31 and April 1 and 2. The attendance was quite large

and the scope of the work done broad in its purposes of general education of the public. Addresses were delivered by Dr. C. H. Irion, president of the State Board of Health, Dr. J. N. McCormack, of the A. M. A., and by a number of prominent members of the medical profession. Tuberculosis, inspection of public school children, hygiene, the water supplies in the State, were among the subjects discussed. New Orleans was represented by Drs. E. D. Martin, Hamilton P. Jones, W. T. O'Reilly, E. L. McGehee, E. M. Hummel and others.

PERSONAL.—Dr. W. E. Parker, of Hot Springs, Ark., writes the JOURNAL that he has entirely recovered from his recent illness due to an attack of facial erysipelas. Dr. Parker's friends will be glad to learn of his recovery after the alarming newspaper reports of his condition.

NOTICE.—The Alumni of the Medical Department of Tulane are again reminded of the fact that Tulane will have headquarters at the Auditorium Hotel in Chicago at the meeting of the A. M. A. Dr. Hugh B. Williams, at No. 100 State street, will be glad to hear from all those who intend to be in Chicago. Some sort of entertainment is planned for the night of June 2, and all interested are requested to write Dr. Williams or to call at the headquarters on their arrival in Chicago. This is important.

PAN-AMERICAN CONGRESS.—This congress meets in Guatemala City, Guatemala, on August 5, 6, 7, 8, 9, 10, 1908. The executive committee have announced a number of interesting subjects for general discussion, including Tropical Anemias, Prevalent Cause and Treatment of Cancer, Segregation of Lepers, Ankylostoma, The Hygienic Equipment of the Soldier, Supply of Drinking Water in Ports and the Prevention of its Contamination, Trachoma, Prophylaxis and Treatment of Yellow Fever, etc. Those desiring to take part in discussions, or to present papers at this congress may write to Dr. Azurdia, General Secretary, Guatemala City, Guatemala; or to Dr. Ramon Guiteras, United States Secretary, 75 West 56th street, New York City.

THE CHAILLE JUBILEE TAKES PLACE ON MAY 19TH.—Subscriptions to the *Chaillé Memorial Fund* can be sent any time to P. O. Box 778, New Orleans.

THE CHARITY HOSPITAL VISITING STAFF.—The members of the medical and surgical visiting staff of the Charity Hospital met in the amphitheatre on the night of April 9 at the call of Dr. E. S. Lewis as senior member of the staff and vice president of the Board of Administrators. In the call the object of the meeting was stated as intending to complete the organization of the staff and to name a conference committee at the suggestion of the Board of Administrators of the Charity Hospital that five of the visiting staff should be named as such. A representative gathering of nearly 60 members was present which resulted in a permanent organization of the staff. Dr. Charles Chassaignac, was elected permanent president and Dr. H. E. Menage, vice president, with Dr. W. W. Butterworth as secretary and treasurer. Prior to the nomination of the conference committee a motion was adopted to the effect that the term "Senior Member of the Staff" should be defined as referring to a member of the staff on the visiting list of the Charity Hospital for not less than ten years. With this preliminary the election of the committee resulted in the selection of the following members: Dr. F. W. Parham, representing the branch of surgery; Dr. P. E. Archinard, representing the medical branch; Dr. Paul Michinard, the gynecological branch; Dr. E. D. Fenner, branch on specialties, and Dr. Charles Chassaignac, ex-officio, as president of the staff.

On motion the president was instructed to appoint a committee of five to frame rules and regulations for the guidance of the organized staff. The president has appointed Dr. L. G. LeBeuf, chairman; Dr. O. Joachim, I. I. Lemann, L. M. Provosty and W. M. Perkins.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will hold its thirty-fourth annual meeting in Louisville, Ky., October 13, 14, 15, 1908, under the presidency of Dr. Arthur R. Elliott of Chicago. The Address in Medicine will be delivered by Dr. George Dock, Professor of Medicine in the University of Michigan, Ann Arbor; and the Address in Surgery by Dr. Arthur Dean Bevan, Professor Surgery in Rush Medical College, Chicago.

The Seelbach Hotel has been selected as headquarters, the general sessions and the section meetings being held in the hotel's large auditoriums.

One of the features of the entertainment projected is a smoker in the famous Rathskeller of the hotel—the finest of its kind.

The McDowell button, so much admired at the 1897 meeting in Louisville, will be reproduced in bronze for this meeting.

CHICAGO HEALTH DEPARTMENT.—All the employes of the department will wear a uniform after April 1. Those below the grade of medical inspector will wear a blue blouse, with a single row of distinctive brass buttons, and a black soft felt hat. The medical inspectors will wear a double-breasted coat, with velvet collar and brass buttons, with a single gold star on the collar, and a black soft felt hat.—*Journal A. M. A.*

The velvet collar will not compensate the inspector, even in warm weather, for the deficiency below the waist.

THE AMERICAN PROCTOLOGIC SOCIETY will hold its tenth annual meeting in Chicago, Ill., on June 1 and 2, 1908, at the Palmer House. The profession is cordially invited to attend all meetings. The preliminary program which has appeared presents a list of interesting subjects referring to the particular division of medicine covered by the title of the society.

THE ALCOHOLIC PROBLEM.—Dr. T. D. Crothers, at Hartford, Conn., has written a communication to the JOURNAL earnestly requesting all physicians interested in the study of alcoholism to send their names and those of any other medical men interested in order that they may be supplied with medical literature covering the propaganda. Over two hundred papers, lectures and pamphlets were published in Europe and America in 1907, but were distributed miscellaneously. The present move is under the auspices of the Scientific Federation Bureau, resident in Boston, and it intends educating the medical profession in the matter of alcohol and inebriety.

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS meets in Washington, D C., on September 21 to October 12, 1908, and promises to establish a record so far as the work in the White Plague is concerned. A bill is now before Congress to permit the use of the Capitol for the purpose of the meetings and there is every likelihood that this will carry. The interest of the Louisiana

délegation in Washington has been elicited and the local committee is stimulating likewise the interest of all members of both Houses.

The State of Louisiana has taken cognizance of this congress and the Governor has recently appointed representatives from the State bodies and institutions interested in the prevention of tuberculosis. These appointments include the following: J. B. Aswell, State Board of Education; Thos. B. Boyd, Louisiana State University; B. C. Caldwell, State Normal School; J. E. Keeney, Industrial Institute at Ruston; Robt. Martin, Industrial Institute at Lafayette; Walter Bynum, Institute for Blind; S. F. Walker, Institute Deaf and Dumb; Dr. E. S. Lewis, Charity Hospital, New Orleans; Dr. Randell Hunt, Charity Hospital, Shreveport; Dr. Clarence Pierson, Insane Asylum, Jackson; Dr. G. O. B. Hayes, Insane Asylum, Pineville; Dr. O. Dowling, State Medical Society; Miss Jean Gordon, Federation of Women's Clubs; Dr. W. H. Dalrymple, American Association of Veterinary Surgeons; Dr. S. E. Chaillé, Tulane University; Dr. Q. Kohnke; Dr. R. Matas, Medical Department Tulane University; Miss Kate Gordon and Miss Eleanor McMain.

CONSOLIDATION OF MEDICAL JOURNALS.—The *Charlotte Medical Journal* and the *Carolina Medical Journal* have been consolidated. A stock company has been created which will conduct one journal in the future. The journal of the new corporation will be known as the *Charlotte Medical Journal*, and will retain the same architectural features, business and editorial management as the present journal of that name.

MEDICAL INSPECTORS FOR NEW ORLEANS PUBLIC SCHOOLS.—On April 4, 1908, the New Orleans School Board elected almost unanimously three medical inspectors. Dr. Edmond Moss, chief inspector, who will receive the salary of \$125.00 a month; Dr. Edward McCarthy and Dr. J. J. Wymer, who will receive a salary of \$100.00 each.

REGULAR MEETING OF THE LOUISIANA SECTION OF THE AMERICAN CHEMICAL SOCIETY.—This society held its regular meeting Friday evening, March 20, at the Board of Trade Building, this city. The subject principally under discussion was "Effects of the Pure Food Law in Louisiana."

MEETING OF THE TERREBONNE MEDICAL ASSOCIATION.—The society met in regular session at the City Hall in Houma, La., on April 9. On request of the superintendent of public schools, W. P. Tucker, and Prof. Foote, in charge of the High School of Houma, the association decided to hold lectures on sanitation, hygiene and other matters pertaining thereto, in all the public schools of the parish, for the benefit of the pupils. Each member has volunteered his services to lecture on certain dates. The secretary was directed to communicate with the Thibodaux physicians regarding the matter of uniformity of fees.

A NEW HOSPITAL FOR ATLANTA, GEORGIA.—The New Tabernacle Infirmary is the name given to a new hospital recently dedicated in Atlanta, Ga. This hospital is modern in all its appointments.

COMING SOCIETY MEETINGS.—The annual meeting of the Texas State Medical Society will be held in Corpus Christi on May 13, 14 and 15 prox.

The annual meeting of the Arkansas Medical Society will be held in Little Rock on May 13, 14 and 15.

The next meeting of the Board of Medical Examiners of the State of Texas will occur at Waco, on the third Tuesday of June, 1908.

The Louisiana State Board of Medical Examiners will hold its next meeting on May 21 and 22, 1908, in New Orleans. Dr. F. A. Larue, secretary.

The ninth annual meeting of the American Therapeutic Society is to be held at the Bellevue-Stratford Hotel in Philadelphia, Pa., on May 7, 8 and 9, 1908.

THE AMERICAN MEDICAL EDITORS' ASSOCIATION will meet at the Auditorium Hotel, Chicago, on May 30 and June 1. An extensive program has been prepared and every member is urged to be present, and medical editors not now affiliated are invited.

REMOVALS.—Messrs. D. Appleton and Company, New York, announce their removal to their new offices, 29-35 West 32nd street, New York City, N. Y.

Dr. Fred. R. Jones has moved from Alexandria to Whiteville, La.

Dr. C. A. Weiss from Lobdell to New Orleans, La.

Dr. J. A. Minton from Baywood to Denham Springs, La.

Dr. T. H. Littell has moved from Morrow to Ville Platte, La.

PERSONALS.—Dr. R. H. Foster has been appointed interne at Teuro Infirmary to take the place of Dr. C. W. Hoefflich, who has gone to Texas.

Dr. H. M. Folkes of Biloxi, Miss., has begun work on a twenty-room addition to the Gulf Coast Health Resort. This sanitarium was opened several years ago and the new rooms are needed to accommodate the patients.

Dr. Emile S. Keitz has left for Europe where he goes to pursue post-graduate studies in the hospitals of London, Paris, Vienna and Berlin. The doctor expects to remain abroad about a year.

Dr. J. W. Gray, Clarksdale, Miss., was elected president of the Mississippi State Medical Association, and Dr. E. F. Howard, Vicksburg, Miss., was elected secretary.

MARRIED.—On March 29, 1908, Dr. Foote Rivers Singleton of Arcadia, La., was married to Miss Mary Edith Tomb of Jackson, La.

On April 2, 1908, Dr. William Robinson Strange was married to Miss Bettie Allen Cragin. Both of New Orleans.

On April 9, 1908, Dr. Edmond Moss of New Orleans was married to Miss May Eola Grunewald.

On April 21, 1908, Dr. R. J. Salatich was married to Miss Laurence Songy. Both of New Orleans.

DIED.—On March 23, 1908, Dr. Oscar J. Thibodaux, aged forty-two years, died at his home in Napoleonville, La.

On March 24, 1908, Dr. N. G. Carter died at his home in Meridian, Miss., aged fifty-eight years.

Mr. C. A. Battle, president of the firm of Battle & Co, St. Louis, Mo., died on March 22, 1908.

Dr. N. K. Vance, formerly of Shreveport, La, died at Atlanta, Ga., on April 1, 1908, aged forty-six years. The doctor was buried at Greenville, S. C., which was his old home.

Thomas J. Finley, a well-known local physician, died on April 18, 1908, aged forty-one years. The doctor was a graduate of Tulane University and a member of the State Medical Society. The *Journal* extends sympathy to the bereaved family.

Book Reviews and Notices.

All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.

Modern Surgery, by JNO. CHALMERS DA COSTA, M. D., W. B. Saunders Co., Philadelphia.

The fifth edition of this book just published, has been thoroughly revised. It is remarkable that a single volume should cover the subject of the principles and practice of surgery, and yet this is what Da Costa's Surgery does. There is not a condition in surgery known and taught that this work does not treat of and in the latest and most approved methods. It is up to date. Each chapter deals briefly but thoroughly with the subject. The illustrations are good, some being in colors. The work is certainly a credit to the author and a valuable acquisition to any library.

MARTIN.

Compend of Surgery for Students and Physicians, by ORVELLE HORWITZ, B. S., M. D. P. Blakiston's Son & Co., Philadelphia.

This is the sixth edition of this little volume which has been thoroughly revised, making the work up to date and containing a brief description of the latest and most approved methods of operation. It is of great value to students and physicians preparing for examinations as it covers the subject pretty thoroughly.

MARTIN.

Heath's Manual of Minor Surgery and Bandaging. Thirteenth edition. Revised by BOLTON POLLARD, F. R. C. S. P. Blakiston's Son & Co., Philadelphia.

This little volume is quite complete and is full of practical and valuable information. It is intended more to offer suggestions in emergencies, many of which are excellent. It is a book which would be of value especially to general practitioners.

MARTIN.

Plaster of Paris and How to Use It. By MARTIN W. WARE, M. D. New York Surgery Publishing Co., 92 William St.

There is no material which is used more and of which less is known than plaster of Paris, and few surgeons as well as general practitioners know the many uses to which it can be applied, nor the methods of applying it. Dr. Ware has done well to edit this little volume; it fills a much needed want and contains such information and suggestions as must be of value to all practitioners. The text is clear and the illustrations good.

MARTIN.

Anemia in Porto Rico. Report of the Permanent Commission for the suppression of Uncinariasis for the fiscal year 1906-1907.

For the suppression of the disease known as Tropical Anemia or Uncinariasis in Porto Rico, a permanent commission, known as the The Porto Rico Anemia Commission, was created by an act of the Legislative Assembly of Porto Rico.

The present report shows the work performed by the Commission

during the fiscal year 1906-1907. In this report are set forth the plans adopted by the Commission to check the advance of Uncinariasis in the Island. At the close of the fiscal year 1906-1907, the 35 stations of the Island had examined and treated 89,233 patients suffering from Uncinariasis. A very interesting part of the report is the scientific one, namely, the more important data acquired by the study and treatment of the disease. The practical working of the Commission is most commendable; the cards giving instructions to farmers and to patients are the summary of suggestions of educational and sanitary measures that should be taken to extirpate this plague caused by the "murderous" parasite found by Oxford at Ponce (1899), known as *Uncinaria* in the preceding reports, and now named after the statements and suggestions of Stiles, *Necator Americanus*.
E. M. D.

A Treatise on Plague. By W. J. SIMPSON. The University Press, Cambridge, England, 1905.

This volume has been written at the request of the Syndics of the Cambridge University Press with the object of bringing within a moderate compass the principal facts concerning plague from its historical, epidemiological, clinical, therapeutic and preventive aspects.

This very remarkable work from all points of view is dedicated to those who are actively interested in plague. Who more than us should be, when the plague has just taken a foothold on our continent and when we should be protected from its spreading over the land just as much as we are now protected from that other plague, Yellow Fever.

It is therefore, with the deepest sincerity that this thoroughly English work is recommended to American readers.

The mechanical and material finish of the book are equal to its fine intrinsic value.
E. M. D.

Practical Fever Nursing. By EDWARD C. REGISTER, M. D. Illustrated. W. B. Saunders Comp, 1907.

No book on the subject could be made more practical. The idea of presenting the principal acts in well-finished photos is eminently profitable. The object has been to present to nurses a working text-book, and that it completely covers the field of practical fever nursing is most certain.

E. M. D.

Progressive Medicine, vol. 3, September, 1907. Edited by HARE and LANDIS. Lea Brothers & Co., Philadelphia and New York.

This volume three of our excellent quarterly digest of advances, discoveries and improvements in the medical and surgical sciences contains a review of the diseases of the thorax and its viscera, including the heart, lungs and blood vessels, a review of Dermatology and Syphilis, a review of Obstetrics and of Diseases of the Nervous System. On every one of these subjects there are notes of most practical importance and illustrations of value, which make this work a most necessary adjunct to the practitioner's equipment.
E. M. D.

Publications Received.

E. B. TREAT & CO., New York, 1908.

The Blues; Causes and Cure, by Albert Abrams, A. M., M. D. Third Edition.

Clinical Treatises on the Symptomatology and Diagnosis of Disorders of Respiration and Circulation, by Prof. Edmond von Neusser, M. D. Part II. *Bradycardia and Tachycardia*.

W. B. SAUNDERS & CO., Philadelphia and London, 1908.

Surgery; Its Principles and Practice, by William Keen, M. D., LL. D., Vol. III.

Diseases of the Heart, by Prof. Th. v. Jurgensen and Prof. L. v. Schrotter and Prof. L. Krehl. Edited with additions by George Dock, M. D. (Authorized Translation from German under Editorial Supervision of Alfred Stengel, M. D.).

Obstetrics for Nurses, by Joseph B. DeLee, A. M., M. D. Second Edition.

P. BLAKISTON'S SON & CO., Philadelphia, 1908.

A Simple Method of Water Analysis, by John C. Thresh, M. D.

Hygiene and Public Health, by Louis C. Parkes, M. D., and Henry R. Kenwood, M. B.

The Functional Inertia of Living Matter, by David Frazier Harris.

D. APPLETON & CO., New York and London, 1908.

Medical Gynecology, by Howard A. Kelly, A. B., M. D., LL. D., F. R. C. S. (Hon. Edin.)

LEA & FEBRIGER, Philadelphia and New York, 1908.

Nervous and Mental Diseases, by Charles S. Potts, M. D. Second Edition. Revised and enlarged.

MISCELLANEOUS.

The Postal Laws and Regulations Pertaining to the Second Class Matter of Mail Matter, Jan. 1, 1908. (Promulgated by Authority of the Postmaster General, Washington, D. C.)

Chronic Constipation and Allied Conditions, by J. Alexander Maxmillan, B. A., M. D. (The Burton Co., Medical Publishers, Kansas City, Mo.)

The Causes and Prevention of Consumption. (Circular issued by the Illinois State Board of Health, 1908.)

Instituto Patológico Nacional, by Ignacio Prieto.

Reprints.

Dieting and Cooking for the Consumptive and for the Thin and Under-Nourished, by Thomas Bassett Keyes, M. D.

Two Cases of Raynaud's Disease with Ocular Symptoms. One Case Complicated by Sclero-Derma; (2) *Observations on Skin Diseases in the Negro*; (3) *Treatment of Sycosis by the X-Ray*, by Howard Fox, M. D.

The Hymen; (2) *Medico-Legal*; (3) *Obstetrics*; (4) *Physicians and Publicity; A Study*, by E. S. McKee.

MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Report of the Board of Health of the City of New Orleans
FOR MARCH, 1908.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	2	2	4
Intermittent Fever (Malarial Cachexia)	3	3	6
Smallpox.....		4	4
Measles	5		5
Scarlet Fever.....	1	1	2
Whooping Cough.....	1		1
Diphtheria and Croup.....	4		4
Influenza	11	11	22
Cholera Nostras.....			
Pyemia and Septicemia	4	2	6
Tuberculosis.....	44	37	81
Cancer.....	15	3	18
Rheumatism and Gout	1	1	2
Diabetes	3		3
Alcoholism	9		9
Encephalitis and Meningitis.....	6	1	7
Locomotor Ataxia.....	1	1	2
Congestion, Hemorrhage and Softening of Brain.....	20	3	23
Paralysis	3	3	6
Convulsions of Infants	2	4	6
Other Diseases of Infancy	19	4	23
Tetanus	2	3	5
Other Nervous Diseases	1	1	2
Heart Diseases.....	38	20	58
Bronchitis	4	6	10
Pneumonia and Broncho-Pneumonia.....	33	47	80
Other Respiratory Diseases.....	10		10
Ulcer of Stomach.....	1		1
Other Diseases of the Stomach	6	3	9
Diarrhea, Dysentery and Enteritis.....	8	10	18
Hernia, Intestinal Obstruction.....	3	1	4
Cirrhosis of Liver.....	8	1	9
Other Diseases of the Liver	1	4	5
Simple Peritonitis	1	2	3
Appendicitis.....	5		5
Bright's Disease	30	20	50
Other Genito-Urinary Diseases.....	8	5	13
Puerperal Diseases	4	2	6
Senile Debility.....	20	5	25
Suicide	7	2	9
Injuries.....	17	16	33
All Other Causes.....	24	18	42
TOTAL.....	384	246	630

Still-born Children—White, 22; colored, 26; total, 48.

Population of City (estimated)—White, 258,000; colored, 93,000: total, 351,000.

Death Rate per 1000 per annum for Month—White, 17.91; colored, 31.77; total, 21.64.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 30.09
Mean temperature 69.
Total precipitation 3.28 inches.
Prevailing direction of wind, southeast.

New Orleans Medical and Surgical Journal.

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No. 12

Original Articles.

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints, may be had at reasonable rates if a WRITTEN order for the same accompany the paper.)

The Evolution of Radiotherapy.*

By DR. BÉCLÈRE, de l'Hôpital St. Antoine.

Abstracted and Translated

By L. L. CAZENAVETTE, M. D., New Orleans.

Radiotherapy is now undergoing the fate of all new medications: some praise it to excess; others, in greater number, reproach to it severe misdeeds. Some try without prejudice to themselves to determine the conditions which preside over its successes and its failure and to establish its indications and contraindications.

Radiotherapy was born in Vienna, in 1896, the year following the discovery of Röntgen. To Prof. Schiff and Dr. Freund belongs this incontestable honor. Their ambition was to cause the shedding, by the Röntgen rays, of some few troublesome hairs. Radiotherapy has extended its domain far beyond their expectations. It is today, in the treatment of certain diseases of the blood, in certain hypertrophied conditions of the glands or spleen, the best medication known. It is, in the treatment of certain

**Bulletin de la Société de l'Internat*, June, 1907.

malignant growths, cutaneous or subcutaneous, an ideal weapon.

How has this extraordinary evolution taken place? What has been its stepping stones? And, above all, what are the facts which justify the extension of the use of the same medication in diseases so different from one another as tinea, leukemia and cancer?

These fundamental facts are of two classes: experimental, the result of laboratory researches on animals, and clinical and anatomopathological, the result of treatment. These two classes of facts are from a chronological point of view, intimately interwoven; but, for convenience of interpretation, it is best to consider them separately.

At the onset, some purely physical very elementary notions are indispensable.

In 1895, Röntgen discovers that a glass bulb containing rarefied air, through which passes an electric current, emits invisible radiations capable of permeating all substances, opaque as well as those transparent to light; their existence is disclosed by the illumination of certain substances and the impress on photographic plates.

The Röntgen irradiation, encountering a living body, divides itself into two unequal fractions, one goes through the body and the other is obstructed in its path. The first fraction, after passing through the body, is collected on a sensitive surface, as a fluorescent screen, or a photographic plate; whereas the second fraction acts in certain doses on the living cells which absorb them, by modifying their chemical composition, changing their nutrition, arresting their growth and setting up degeneration and death.

This last alone interests us in radiotherapy and it is important to know the laws which preside over its absorption in the tissues.

The Röntgen radiation starting from such a narrow surface, practically a point, is subject to the common law, viz.: the law of inverse action to the square of the distance. The surface which, at a fixed distance from the anti-cathode receives a certain fraction of radiations, will receive no more at twice the distance, than a fraction four times less.

According to this law, a unit of surface receives from the superficial towards the deeper parts, in successive layers of the same irradiated region, a fraction of rays always decreasing, the more so, when the focus of the Röntgen rays is nearer the skin.

But it is important to consider the absorption, during transit, by the tissues irradiated.

This absorption, notably more intense for the bony parts than for the soft parts, is very nearly the same for the cutaneous, adipose and muscular tissue which compose the latter. A region exclusively composed of soft parts, whether normal or pathological, can, therefore, from the point of view of the absorption of the X-rays, be practically considered as a homogeneous medium.

In an homogeneous medium, the quantity absorbed by successive layers of equal thickness decreases regularly and rapidly from the surface to the deeper parts, without the law of progressive decrease being strictly adhered to.

It is only known that the rapidity of this decrease varies notably according to the degree of rarefaction in the interior of the X-ray tube, and the quality of the mixture of the irregularly penetrating rays emitted by that tube.

To cite an example: at a distance of 20 centimeters between the focus point and the skin, with a soft tube of rays corresponding to No. 3 Benoist's scale, the dose absorbed at one centimeter in depth is not greater than a quarter of the dose absorbed by the superficial layer of the epidermis. At the same distance, with a high tube which emits more penetrating rays, No. 8 Benoist, the dose absorbed at one centimeter in depth reaches five-eighths of the superficial dose.

To diminish the inevitable digression between the doses, superficial and deep, it is necessary to choose a tube which emits very penetrating rays and to place it at a great distance from the skin.

In spite of all precautions which only lessen the rapidity of the decrease of the quantities absorbed, this fact remains unchangeable: The fractions of Röntgen radiation absorbed by the successive layers of one region, decrease rapidly from the surface towards the deep parts.

Such is the inexorable physical law which limits in depth the field of the biological action of the Röntgen rays.

So soon after the discovery of Röntgen, one does not suspect that that fraction of radiation absorbed by the living tissues is capable of modifying them, and it is with astonishment that in several patients, exposed too long to the action of the Röntgen rays for the purpose of exploratory diagnosis, one sees, after

a latent period of several days, the skin becoming the seat of reactionary phenomena.

This cutaneous reaction presents various degrees, from the falling of the hair without any sign of inflammation, up to the death en masse of the skin and subcutaneous tissues, after undergoing simple redness, vesication, with superficial erosion and ulceration, more or less deep, of the derma. All these lesions, except simple depilation, recall closely enough the different degrees of a burn, so that in Germany it was given the name of "X-ray burn."

It is the report of these accidents which suggested to Schiff and Freund the idea of utilizing therapeutically the depilatory action of the Röntgen rays.

In 1900, however, it was still a disputed question to know the true cause of X-ray lesions, whether it was the electric current which necessarily accompany the production of the rays, or the rays themselves, without speaking of other hypotheses.

The experimental researches attempted on animals by Dr. Sträter in Germany, Dr. Kienböck in Austria, and Dr. Oudin in France decide definitely this question and place beyond doubt the exclusive action of the X-rays.

It is henceforth demonstrated that the Röntgen rays act on living tissues and that on these, as on the fluorescent screen or photographic plate, they act wherever they are absorbed and according to the amount absorbed. The cutaneous accidents are well worth the name radiodermatitis.

When the radiodermatitis at its highest degree ends in scari-fication en masse of the skin and subcutaneous tissues, the microscope is unable to separate the primary from the secondary lesions, it is impossible to say whether the gangrene is directly due to the rays or consecutive either to vascular or nervous lesions.

To resolve this question, to observe the lesions in their initial state and to follow step by step their progress it is necessary to experiment on animals, whose skin resembles human skin, e. g., on the young pig, as was done in 1902 by Dr. Scholtz, of Koenigsberg, by taking, at regular intervals after irradiation, fragments of the surface treated.

Those experiments placed absolutely beyond doubt this main fact: that the lesions produced by the X-rays are primarily cellular lesions which reach the nucleus and the protoplasm of the

cells irradiated and which end, before all phenomena of inflammatory reaction in degeneration and death of these cells. These researches can be briefly summarized as follows:

The Röntgen rays have a tendency to destroy cells. This proposition must be amplified. The different species of cells are not equally sensitive to the action of the X-rays. Some are destroyed, whereas others are not. More than that, to destroy certain cells the necessary dose is notably inferior to that which is sustained without apparent lesion by cells of another species.

Thus the Röntgen rays have a distinct selective action on the various cells.

It is necessary to understand this well. Those rays make no difference between the different cells and are absorbed as much by some as by others. Some are much more sensitive than others to their action. Although we still ignore the reason of this difference of sensibility it is probable that it is allied to a difference in chemical composition.

Following the researches of Scholtz it seems reasonable to consider the cells of the epidermis as those most sensitive of all to the X-rays.

In 1903, Dr. Albers-Schönberg, of Hamburg, shows that rabbits and guinea pigs after a series of irradiation of a suitable intensity and duration, lose the faculty of reproduction. This loss supervenes without the least change in the general state, and without the least inflammatory reaction of the skin; it supervenes even without any diminution of the sexual appetite or of the exercise of same. It is due solely to a lesion of the spermatozoa; these cells are at the onset destroyed and are found later deprived of motility, not giving any sign of life in the spermatid fluid, and then disappear completely; the inner lining of the seminiferous tubules produces them no longer, because it has lost its lining of epithelial cells.

Shortly afterwards Dr. Halbestaetter, of Breslau, repeated on female guinea pigs the experiments of Albers-Schönberg and produced without change in the skin the destruction of the cells of the ovarian vesicles, just as his predecessor had produced in the males that of the seminiferous tubules.

In 1904 Dr. Heineke, of Leipzig, first placed beyond doubt the profound and deleterious action of the X-rays on the internal

organs of small animals. He demonstrated that white mice and young guinea pigs, after having been submitted to a series of hours of irradiation of sufficient intensity, die in a delay of from seven to fourteen days.

When death supervenes before the tenth day, it cannot be explained by a septicemia subsequent to the inflammation of the whole skin, since it is only at that time that the first signs of radiodermatitis appear in the shape of a greater fragility of the hair.

It can not be explained, either, by a direct action of the X-ray on the central nervous system, since it supervenes alike in animals whose heads are covered with a sheet of lead four millimeters in thickness.

In those cases is found at autopsy an extraordinary small spleen of a brown-black color. Microscopical examination shows an increase of splenic pigments and disappearance of the corpuscles of Malpighi, also a very extensive swelling of the cells of the splenic pulp. These various lesions do not appear simultaneously. The first to appear is the destruction of the follicles of Malpighi. In irradiating simultaneously a great number of animals of similar weight, which he kills by series at regular intervals, Heineke discovered a very important fact: the cell modifications, which lead to the disappearance of the splenic follicles, begin a few hours only after the onset of the irradiation, reach their maximum between the eighth and twelfth hour, and are complete after twenty-four hours; they consist in the death of the lymphocytes of the follicles and in the division of their nuclei, the debris of which become prey to the phagocytes and disappear rapidly.

Analogous processes of destruction are simultaneously observed in all the groups of the lymphatic ganglions of the body, in the follicles of the intestinal canal and, in young animals, in the thymus. They do not appear in the myelin of the bone except a little later.

The X-rays induce in dogs exactly the same process of destruction of the lymphatic follicles, and the minimum duration of irradiation necessary to produce this result is suprisingly small.

In fact, a quarter of an hour of irradiation of the abdomen with a hard tube placed at a short distance is sufficient, according to the researches in question, to induce in a dog of average size, after a few hours' delay, only complete destruction of a certain num-

ber of lymphocytes in the follicles of the spleen and in the mesenteric and intestinal ganglion. One irradiation of such short duration, however, is incapable to alter in an appreciable manner the general state of the animal any more than to induce scarcely a notable reaction on the skin.

Hence it appears that the lymphocytes, deeply hidden in the interior of the organs, are more sensitive to the X-rays than the cells of the epidermis. They respond much more rapidly since the period of latency, so characteristic in cases of radiodermatitis, is here suppressed. The extraordinary sensibility of the lymphocytes to the action of the X-rays is supported especially by the fact that, in spite of their deep location, they absorb a quantity of rays very notably inferior to those absorbed by the epidermal cells. The dose which destroys them is only a feeble fraction of that withstood without damage by the epidermis.

A summary of the principal results of experimentation on animals follows:

The various cells of the normal organism are very unequally sensitive to the action of the X-rays.

The lethal dose for some of them is but a very small fraction of the dose tolerated by others.

Among the most sensitive are the cells of the genital glands, testicles and ovaries, and the white cells of the hematopoietic organs. In spite of their relatively deep situation the ray can destroy them through the skin and without appreciable lesion to the latter.

The physiologic action of the X-rays singularly enough throws light upon their therapeutic action and helps us to comprehend its mechanism. The therapeutic experiments have on the contrary surpassed the experimental researches. It was impossible to foresee the power of the Röntgen rays on neoplasms, any more than the study of the physiologic action of mercury was able to make one guess the specific action of this metal in syphilis.

Since the Röntgen rays cause a shedding of the hair, its use is indicated in hypertrichosis and in the parasitic diseases of the hair, in tinea, especially in tinea tonsurans, where the abnormal fragility of the hair, which breaks at the least pull, does not allow us to obtain, by epilation with forceps, the excellent results observed in the treatment of tinea favosa.

To Drs. Schiff and Freund is due the merit of having first put this idea into execution. But the results obtained by others who follow their example are extremely different. Whereas, some in spite of repeated seances of irradiation do not even cause epilation, only one seance is sufficient to cause cutaneous lesions which result in gangrene of the skin.

There exists no sure means of estimating the factor to which belongs in such cases the essential role, and radiotherapy thus grows at random, without rules or precise methods until the day when Dr. Guido Holzknecht, of Vienna, following the researches of Dr. Goldstein, of Berlin, demonstrates that salts are capable of being colored equally by cathodic rays as by X-rays. This is the principle of his instrument of measure (the chromoradiometer) consisting of a number of colorable discs to be placed on the region treated and of a graduated scale, as a standard of comparison. It indicates according to the intensity of the tint obtained by the reagent, the quantity of rays absorbed by the skin.

From the invention of this instrument of measure in 1902, truly dates the accession of scientific radiotherapy. The advantages of exact dosage were well demonstrated by Dr. Sabouraud in his memoirs on the treatment of tinea published in 1904 in the *Annals of the Pasteur Institute*.

By his methodic application of the Röntgen rays in the treatment of tinea tonsurans, especially in severe cases, one single irradiation, properly dosed, on each patch suffices to cause a shedding of all the diseased hair, soon to be followed by sound hair devoid of parasites.

Radiotherapy does not destroy the spores which cause this disease, since the hairs, detached with their roots under the influence of the X-ray, give cultures similar to those which result from those not treated. It acts by destroying the cells of the epithelial covering of the hair papillae, by cutting off its continuity with the diseased hair and rendering the latter a true foreign body, and is then eliminated with the living parasites which it contains. The new hair growing under a dead one is not contaminated.

The superiority of this treatment in tinea is due to the fact that the rays reach the root of the hair and even the hair papillae in regions inaccessible to all external antiseptics.

The deepest cells of the epidermis and the cells of the epithelial

layer of all the glands of the skin are easily acted upon by the X-rays. Thus is explained the successes of radiotherapy in all affections of the skin where the indications are to desquamate and to renew its epidermic layer down to the very deep glandular depressions and ramifications. In rebellious acne, chronic eczema, persistent psoriasis, intense localized pruritus, the X-rays remain frequently the best therapeutic agent, after all others have failed; their utility appearing every day greater to the eyes of the dermatologists.

En résumé, the use of the Röntgen rays as a depilatory and desquamatory agent in the treatment of various dermatoses constitutes a department in radiotherapy of very practical importance.

Radiotherapy has made immense strides in the treatment of tubercular lesions, neoplasms and leukemia.

In 1896 Prof. Schiff first attempted the treatment of lupus by the X-rays.

Radiotherapy acts well in the various forms of cutaneous tuberculosis, especially in the verrucous form. It causes cicatrization of ulcerated lupus patches, flattening of a tumefied lupus of the face, a reduction in volume of lupus elephantiasis of the limbs as no other therapeutic agent can do. It is not infallible, however. It may cure the most severe caess and fail completely to affect the simplest form. It acts, it is said, by doing the rough work, to the thermocautery or galvano-cautery belong the rest.

The Röntgen rays do not destroy the bacilli of Koch any more than they do the spores of tinea. The interpretation of their action in lupus demands more studies. If one admits, however, with Le Dantesthal, in tuberculosis the giant cells stuffed with bacilli can be considered as a whole as a true parasite of the host within it, it seems reasonable to attribute the good of radiotherapy to the destruction of giant cells.

Radiotherapy acts through the skin on chronic adenopathies of tubercular origin involving the ganglions of the neck, axilla, inguinal region and even of the mediastinum. Sometimes it causes a diminution and complete disappearance of very large adenopathies, whereas at other times it seems to be without any action whatever. It helps in the cure of fistulous tracts, and acts even in tubercular lesions of the bones and joints when superficially located.

The selective destructive action of the X-rays is more manifest in the treatment of neoplasms and in leukemia.

In 1899 Dr. Magnus Möller presented to the Medical Society of Stockholm the first case of cutaneous epithelioma successfully treated by X-rays. Dr. Thor Steubeck, of Sweden, Dr. Sequeira, of London, Dr. Williams, of Boston, and Dr. Skinner, of New Haven, published immediately afterwards analogous cases. Since the invention of the radiochromometer a great number of reports of such cases have been published.

Under the influence of the Röntgen rays an epithelioma in the temporo-maxillary region in a man of 72 years, of rapid growth, diminished and disappeared, leaving an invisible cicatrix, without at any time showing the least signs of inflammation even on the adjoining skin. It shrunk and disappeared just as a syphilitic gumma would dissolve under the influence of mercury and iodide of potassium.

The Röntgen rays may be said to have a specific action on neoplasms, since there is no other known agent, chemical or physical, capable of such action on epitheliomas.

In this case the epitheliomatous cells have been destroyed by doses which have left intact the surrounding skin. The general law governing this action is probably of chemical order, but still unrecognized. Neoplastic cells are notably more sensitive to the action of the Röntgen rays than the neighboring healthy cells. Their sensibility varies greatly within very broad limits.

The greater number of epitheliomas, whatever be their historical nature, are amenable to radiotherapy. They are thereby definitely cured, provided the total dose of the rays absorbed goes notably beyond the strictly sufficient dose for an apparent cure. The esthetic result obtained surpasses that of any other medication and it should therefore be the method of choice.

This does not mean that they are all cured by radiotherapy and that surgical intervention is not to be preferred to it, particularly so in cases of rapid evolution where the deeper parts are involved.

In 1901 Dr. Clarke first obtained beneficial action in cancer of the breast. In certain cases of slow evolution, when the cancer is still limited to the mammary gland and exceptionally when the skin and superficial ganglions are involved, radiotherapy gives excellent results.

Radiotherapy shows its efficiency especially after surgical intervention. It prevents relapses. Even when these begin to show as hard nodules they diminish and disappear. Sometimes, however, in spite of the local cure the fatal termination is only retarded. Death is due to secondary localization of the growth in the deep ganglions of the mediastinum or in the viscera.

Summarily it can be said that, in all cases of growths of the breast after surgical intervention or when judged inoperable, radiotherapy is the treatment of choice, capable of giving local cure, of improving the general state and of prolonging life, or at least of alleviating the last pains and of cherishing a last hope.

Sarcomatous cells are more sensitive to the X-rays than the cancer cells. This has been demonstrated since 1902 by many reports of sarcomas cured by radiotherapy, notably by Dr. Coley and Dr. Pusey.

The sensibility of various sarcomas varies within very wide range, even when, by their histological formulas, by their location, volume and point of departure, they seem similar. Certain sarcomas manifest in this regard an extreme sensibility, which shows itself by their diminution and rapid disappearance in spite of their subcutaneous location, after the absorption of relatively feeble doses. It seems wise to make of them a particular group of neoplasms in which the radiotherapeutic test alone allows a differential diagnosis.

Again, when this extreme sensibility is combined with a slow evolution and with unaffected lymphatics, we hear of incontestable cures occasionally obtained by radiotherapy in voluminous and deep-seated sarcomas of the abdomen and mediastinum.

The depth to which a neoplasm ceases to be accessible to radiotherapy varies with its degree of sensibility to the Röntgen rays.

The most important factors upon which depend the success of radiotherapy in malignant subcutaneous tumors (cancer and sarcoma) are: the more or less rapid sensibility of these cells to the action of X-rays; their subcutaneous location; the rapidity of their growth; the involvement of lymphatics, also the proper technique and dosage employed.

The white blood cells, in their pathological state, the abnormal multiplication of which in the hematopoietic organs produce the various forms of leukemia, or the various localization of lymphatic

denia, are much more sensitive to the Röntgen rays than the neoplastic cells.

Dr. Senn, of Chicago, in 1903, published the first report of leukemia successfully treated by radiotherapy. But it is only after the report of the experiences of Dr. Heineke, of Leipzig, that radiologists methodically submitted to radiotherapy patients suffering with leukemia, and verified the wonderful beneficial action of this medication.

Radiotherapy is today the specific treatment in both forms of leukemia (lymphatic and myelotic), also in the various forms of lymphadenia (osseous, splenic, tonsilar, testicular, etc.); since although not curative of these mysterious affections, it produces effects and ameliorations impossible by any other known agent.

To dissolve the tumors of mycosis fungoides, to diminish in a leukemic large masses of ganglions of the neck, axillæ, and even mediastinal, to bring back to its normal size hypertrophied spleen, to diminish to a normal count the number of white blood cells and reestablish corpuscular equilibrium, to increase consecutively the number of red cells and their richness in hemoglobin, there is certainly no agent more powerful than the Röntgen rays.

The surprising reduction in size of enlarged spleen is due to the destruction by the X-rays of innumerable pathological cells infiltrating it.

However extraordinary may be the therapeutic results in the most favorable cases of leukaemia they are not, however, synonymous to a cure. The temporary improvement in some has only retarded the fatal termination; an apparent cure in others has been followed by a return of the condition which failed to respond to further treatment. The most reasonable explanation to this is that a certain number of pathological white cells do not receive the destructive action of radiotherapy and later become points of departure of new growths and new secondary foci, not accessible to treatment than the primary ones.

Be this explanation what it may, one can not say that the therapeutic action of the Röntgen rays is exclusively superficial.

The scientific reason, then, for the application of one means of treatment of diseases as different from one another as tinea, cancer and leukaemia, can be formulated as follows:

The Röntgen rays have a distinct selective action on the various cells, normal or pathological.

From a therapeutic point of view one must consider the following cells as those most sensitive to their action: the cells of the epidermis, normal or pathological; the white blood cells, and those of the blood forming organs, particularly in their morbid state; the giant cells in tubercular lesions, and finally the majority of neoplastic cells.

Treatment of Inoperable Cancer.*

By HENRY R. SLACK, Ph. M., M. D.,

President Georgia Pasteur Institute, Atlanta; Superintendent La Grange Sanitarium,
La Grange, Ga.

An inoperable cancer. Can any language convey a doom more dreadful to the patient? One sees the steady advance of the grim Reaper, borne on by his most dreadful allies, disease, weakness, pain, anguish and prolonged suffering. This awful retinue, that adds so much to the dread of the King of Terrors, is more constant in cancer than in any other disease. Not even in "consumption's ghastly form" is the victim so bereft of hope, in fact, consumptives are usually hopeful and are constantly expecting to get well when they "throw off this heavy cold."

Cancer has the whole world for its field and destroys "all sorts and conditions of men," no race or clime is exempt from its ravages, and it is even found among the lower animals, while more frequent among the old, the young do not escape, as Osler reports six cases of cancer of the stomach in the first three decades.

It is useless in a paper of this scope to attempt a discussion of the etiology or pathology of cancer. There are research laboratories in this country and in Europe trying to discover these and a remedy, and ever and anon we read of some wonderful cure for cancer that has been found from radium or trypsin, but they will not stand the crucial clinical test.

When is cancer inoperable? There are no hard and fast lines to determine this, and each surgeon is a law unto himself; some will only operate when discovered early, while others will take greater chances and sometimes get a brilliant result, but their

* Read before the Chattahoochee Medical and Surgical Association, Columbus, Ga., Jan. 14, 1908.

recurrent cases are very high. As a general rule, one is safe in pronouncing a cancer inoperable when the glands are indurated for 15 to 20 c. m. from the primary neoplasm.

The wise old father of medicine, Hippocrates, writing over twenty-three (23) centuries ago, says this of treating cancer: "The deep-seated forms are best untreated, for, if treated, the patient soon dies, otherwise he might live a long time."

Dr. Jos. D. Bryant, in his address on surgery before the American Medical Association in 1906, stated that "Inaccessible cancer is two and one-half times more frequent than accessible." Therefore, any line of treatment that gives reasonable assurance of prolonging life and alleviating pain will be welcomed by the physicians and a boon to suffering humanity. Particularly is this true when the methods of administration are as simple as the ones I shall present for your consideration to-day.

Over ten years since I read a paper before the Medical Association of Georgia entitled, "Blue Pyoktanin in the Treatment of Inoperable Malignant Growths." This paper was published in the *Journal of the American Medical Association*, June 27, 1897, and was pretty widely commented on. Shortly after this the X-Ray began to be applied in the treatment of cancer with such marked success that all other methods, except surgical, were completely eclipsed by this new and wonderful light, which undoubtedly does possess valuable therapeutic power. The novelty of Röntgenization had not worn off before the discovery of the new element, radium, added a still more mysterious weapon to our therapeutic armamentarium. The extravagant claims made of cures effected by the radiations of this new element have not been substantiated by the experience of careful clinicians. Even Dr. Willy Meyer, of New York, who first introduced blue pyoktanin in the treatment of cancer in America, seemed to have been carried away by the new agents, but not so with that sturdy old Nestor in medicine, Dr. A. Jacobi, of New York. He has kept steadily and quietly using in his immense practice methylthionin hydrochlorid, as it is now called, or methylen blue, in the treatment of inoperable malignant growths, until he has now treated over 150 cases, as reported at the last meeting of the American Medical Association in Boston.

Herbert Spencer says: "Our judgment is bad on our personal

experience." My personal experience with methylen blue has been very satisfactory, though I have abandoned the hope expressed ten years since of effecting a cure by using it alone. I have *cured* a number of cases by using it in connection with X-Rays.

The treatment used by Von Mosetig and Willy Myer of parenchymatous injection of an aqueous solution proved so painful that I have abandoned their technique for Jacobi's simple method of administration by mouth. I usually give a tablet of methylen blue, 2 grains and extract of belladonna $\frac{1}{4}$ grain after each meal. If there is any ulcerating surface present I dust it with 4% or 5% powder, or use 2% or 4% injection daily. I also use X-Ray, if on the surface, as I have seen a number of *cures* follow careful, persistent and judicious Röntgenization.

I reported five cases in my paper and have since treated thirty-two, but will give only three, as they are thoroughly representative.

Case 17, Mrs. M. E. B., age forty-six, widow, had nine children; three miscarriages. Complains of large and painful tumor in right breast and under arm. Family history negative. Personal history, had usual diseases of childhood; menstruation thirteen years, regular, and passed the climacteric in forty-eighth year without incident. Had had typhoid fever, pneumonia, and malaria. Health not good for last seven years. Present trouble started in October, 1899, with lump in right breast, but did not give much pain or grow rapidly until January, 1903. Appetite good and bowels regular.

Examination—Fairly well nourished woman, heart and lungs negative, has tumor in right breast as large as goose-egg, adherent and nipple retracted, axillary glands indurated. Case went to St. Joseph's, Atlanta, for operation, but surgeon said was inoperable carcinoma.

Treated with X-ray for ten weeks. The induration in axilla entirely disappeared and tumor in breast reduced to size of chestnut. She then left me, and I did not see her any more until February 1, 1904. She had been treated by a local physician with X-ray, and had bad burns, which had to be healed before treatment could be resumed. After six weeks she was in fine condition.

October 25, 1906, she returned very feeble and cachectic, with a

foul ulcer above the nipple over an inch in diameter, and also two ulcers in the axilla. The arm was very painful, much swollen, and could not use it at all. This time we used the methylen blue tablets internally and applied the powder to the ulcers daily, as well as X-ray to it occasionally. Her improvement was marked, and she is now free from pain, ulcers healed and is doing nicely, thought not cured.

Case 21.—J. W. M., age forty-six, male, farmer, complains of sore on lower lid of left eye. Family history. Father had similar place. Personal history: Has had usual diseases of childhood, denies venereal disease, general health good. Present trouble started with a crust and scab over two years ago, and had gradually grown larger until now it is larger than a dime. Appetite good and bowels constipated.

Examination: Well nourished man, heart and lungs negative. Has epithelioma size of dime under left eye. Treated with X-ray three times a week for six weeks and ulcer reduced in size to grain of wheat and gave no trouble, but never did heal or disappear until I used methylen blue internally and applied powder to surface. Has now been well several months.

CASE 26: L. J. N., age forty-six, female, married, one child, first consulted me thirteen years ago for dysmenorrhea and sterility. Found stenosed cervix; dilated, and ten months afterward she gave birth to a fine girl. Did not see her again until five years later. Was then complaining of pain in back, leucorrhea, etc. Examination showed lacerated cervix, with ulceration.

January, 1907, her husband said she was "mighty bad off; sick in bed, suffering all of the time, and bleeds a great deal; sickness on her all of the time."

Dr. McCall, my assistant, called to see her and found exfoliating carcinoma of uterus, involving the vaginal walls, and inoperable. He gave methylen blue internally and injection of 2% solution daily. She is now up free from pain, and able to do her housework.

I have selected these three cases, not because they have given such brilliant results, but because of their peculiar interest.

CASE 17: Had been pronounced "inoperable carcinoma of breast," over four years ago. Had yielded for a time to X-Rays, but after several burns tolerance was established and the disease

spread, causing much pain and destroying health. Upon administering and applying the methylen blue the disease again yielded, and the patient is now enjoying fairly good health and is free from pain.

CASE 21 was epithelioma of lower lid, which was benefited by X-Rays, but did not get well until using the methylen blue.

CASE 26: Carcinoma of uterus, following laceration of cervix, which is being arrested by administration of methylen alone.

Of thirty-two cases treated with X-Rays or combined with methylthionin hydrochlorid, fifteen have been dismissed as cured, eight have gone over three years without recurrence. The other seven, ranging from five to thirty months since dismissal, show no evidence of return. There are seven still under observation, five of whom are doing fairly well, as the disease is in abeyance, they suffer very little and are able to attend to their usual duties.

Of the fifteen cases cured, nine were epitheliomas, four were carcinomas, and two were sarcomas.

My experience with the methylthionin hydrochlorid teaches me to expect the following results: First—Everything with which it comes in contact is stained a deep blue, the urine looks like blue ink, and you should always tell your patient to expect this. Second—There is surcease from pain and foul odor disappears. Third—The general health of the patient is improved, and years are added to his life.

It thus helps us to carry out the noble aim of our profession, "To alleviate suffering and prolong life."

LITERATURE—*Journal of American Medical Association*, June 27, 1897; *Ibid*, June 9, 1906; *Ibid*, Nov. 10, 1906; *Osler's Practice of Medicine*, Sixth Edition.

The Relation of Adenoid Vegetations and Enlarged Tonsils to the Growth and Development of Children Mentally and Physically.*

By H. G. SAVAGE, M. D., Warsaw, Mo.

There are two kinds or varieties of adenoids:

First—A spongy soft mass in the vault of the pharynx, watery, easily compressed and very vascular.

Second—A fibrous, irregular-shaped tumor which does not bleed so easily upon making a digital examination, or after being removed.

I do not know what per cent of the second class of tumors is found with specialists in cities, or with large practice, but since I commenced to specialize about four years ago, I suppose I have done sixty or seventy-five adenoid operations and I have not found but one of the fibrous tumors.

The relation of adenoid tumors to deaf mutism has been made a study by several eminent specialists. In one asylum it was found that fifty-nine per cent of the inmates had adenoids large enough to completely fill the naso-pharynx. About two-thirds of these were boys and one-third girls. Some of these have been entirely cured and others greatly relieved, both as to speech and hearing by removing the adenoids.

The facial expression or appearance of a child with large adenoids is very noticeable to one who has made this subject a study. The superior maxillary bone often presents an arched or contracted appearance. The roof of the mouth being very high and narrow, which has resulted from the necessities of mouth breathing.

While it is a very superficial way of making a diagnosis for adenoids (and should always be confirmed by a thorough examination), yet it has been a positive one with me. So far in each patient I have examined with the marked arch palate I have found large adenoids, but a positive diagnosis can be made by using the right index finger.

This method of examining children for adenoids is used exclusively at the Eye, Ear, Nose and Throat Hospital, New Orleans. It causes no pain whatever and the left thumb being placed gently against the child's cheeks keeps him from biting you. It requires

* Read before the Benton County, Missouri, Medical Society, Jan. 11, 1908.

very little time and can be made any where, without the use of any instruments. The only essentials are, soap, water and towel.

ETIOLOGY.—This is mostly a disease of childhood, though not necessarily so, and is claimed by some writers to be found in a greater ratio in the poorer classes of the large cities, those who live in cellars and the thickly settled tenement districts, where they get very little pure air, practically no sunshine and an unwholesome, poor diet. I can not state personally as to that as my practice has always been in the small towns and the country where pure air, good food and all the essentials of proper development were abundant, and I find a very large per cent of the children have adenoids under conditions above mentioned.

I have had no chance to examine children collectively, schools, or institutions of any kind, but I believe I am safe in saying that ninety per cent of the children who have enlarged tonsils have adenoids. Where the tonsils are very large the adenoids will also be large.

SYMPTOMS.—The most striking features in a typical case of this affection are parted lips, eyeballs more or less prominent. I do not find the prominent eyeballs except where the adenoids have existed for some time. A face with practically no expression, an appearance of indifference, listless, mouth breathing and a coarse, heavy snoring when asleep. One peculiar thing I have noticed but have never seen it mentioned in any journals or works on this disease, they almost invariably sleep on their backs, a characteristic thick nasal speech, have a poor memory and are not attentive in their work or studies. There is at times a thick grayish, sometimes slightly bloody, discharge from the nose which is exaggerated upon taking the slightest cold, which occurs frequently. Inhaling camphor, ammonia, menthol, dust, any thing that causes the slightest irritation will excite an attack of coryza and more difficult breathing.

The history the parent gives, or they frequently do, of any thing like a typical case is something like this: This child seems to be getting hard of hearing, sometimes we have to speak to him two or three times before he seems to hear, he is forgetful and does not learn like the other children, he doesn't even care to play like he used to and he is becoming hollow-chested, has a cold nearly all the time, complains of earache occasionally, breath very bad and

especially on arising of mornings. Of course other symptoms may appear, some of these be very much exaggerated or some absent altogether, but that is something like the history obtained where the adenoids have existed for some time. The diagnosis is confirmed by an examination as described.

TREATMENT.—With the advent of adult life the tendency is for these to absorb or disappear entirely but they have played havoc long ere they depart. There are a great many reasons why they should be removed early, and I think parents should be instructed as to the necessity of having their children's throat and nose carefully examined at least once a year, between the ages of four and ten years, as so much good can be accomplished if treatment is instituted in the beginning of the disease.

There is a great danger of serious ear complication, the great liability to and seriousness of infectious diseases, especially scarlet fever and diphtheria. The influence of the obstruction on the general health, mental development and the formation of the face.

It has been and is yet the practice of many physicians to treat adenoids with sprays, washes, caustics, the galvano-cautery, etc. Thus extending the treatment over a period of several weeks, sometimes months, and when the patient is discharged, *if at all*, it is far from well. I prefer the one operation, lasting from two to five minutes and resulting in a permanent cure. It does not require many instruments and not much skill or practice to successfully perform the operation. The instruments necessary are: Curette (the operator should have two sizes and better to have three, a set), a mouth gag, and I prefer Denhart's, which is cheap and simple, an ounce of bromide of ethyl and an inhaler so arranged as to exclude all the air, or nearly all. I shall not say anything about the preparation of the operator or the instruments as we all know to get the best results, no matter how trivial the operation, to be thoroughly aseptic. It is better to have an assistant to give the anesthetic, but I have performed the operation alone a great many more times than I have with the aid of an assistant.

The ethyl bromide must be pure and fresh, after being exposed to the air or a bright light it should not be used. If we have two operations at the same time one tube usually suffices, but otherwise it requires a tube for each operation, as it is inert after being exposed to the air a short time.

Potts' Disease; Its Early Diagnosis and Treatment, With Report of A Case.*

By DR. G. KING LOGAN, New Orleans, La.

In selecting Pott's disease among the many and varied forms of joint tuberculosis as the title of my paper, I was influenced in my choice not by the fact that it was one of the more obscure and rarer forms of tubercular joint involvement, but principally on account of the advanced stage to which these cases have progressed before they come under our observation and treatment. I hope by the reading of this paper and the discussion which it may arouse that I may be able to emphasize the necessity and of an early recognition of this disease in the stage most satisfactory for its treatment.

Tuberculosis of the spine is by no means a new disease, and is more frequently the spot chosen for this infection than any other single bone or joint. Medical literature as far back as we go contains descriptions of this deformity and its treatment; but it was not until 1779 that, as the result of an article written by Sir Percival Pott, in which he described the disease most accurately, the present name of Pott's disease came into universal use. He described it as "A palsy of the lower limbs frequently found accompanying curvature of the spine and supposed to be caused by it. He, however, considered the condition due to "a localization of unhealthy exudates." The tubercular nature of the lesion was first pointed out by Delpech, Nelaton and the earlier French investigators, and it is to their efforts that our present knowledge of the disease exists. We now know it as a chronic destructive osteitis, tubercular in nature, and similar in pathology to the same condition met with in the other joints. The disease limits itself to the bodies of the vertebræ, the hard bone of which the spinous, transverse and articular processes are composed, making them effectually resist infection. As the destruction becomes extensive, a sinking in of the spine occurs and the typical Pott's kyphosis is produced. This osteitis is progressive, rarely confines itself to one vertebra, but extending above and below its primary focus, involves adjacent vertebræ. Coincident with this tissue destruction, a regenerative osteitis occurs and new bone is formed within the surrounding inflammatory mass. The intervertebral discs disinte-

* Read before the Orleans Parish Medical Society, March 28, 1908.

grate and disappear, and after ankylosis has occurred the vertebral bodies will be firmly united and the usual lines of demarcation obliterated.

Abscess formation, though not always appearing externally, is shown by autopsy to have been almost universally present at some stage of the disease. Pus is a conspicuous and prominent feature in some cases, and "cold abscesses" are seen, usually appearing in the cervical, dorsal, or inguinal region. Other cases present the so-called Pott's paraplegia. This usually occurs when the focus of the disease is located in the central or posterior portion of the body of the vertebræ, and is due to an extension of the inflammation to the spinal cord. The paralysis is gradual in onset, involves the motor tract, and is frequently one of the earliest symptoms present in the disease. When the destruction is extensive severe pathological changes occur. The whole contour of the chest is changed, the aorta distorted and the heart frequently hypertrophied and the seat of grave valvular lesions. This necessarily has a deteriorating effect on the health and proper development of the subject, who usually shows this most markedly in his general appearance. Even in the more severe cases of deformity, a cure is possible, and takes place either by ankylosis between the bodies of the diseased vertebræ, or by the deposit of new bone occurring in the inflammatory area and surrounding and enclosing the focus of the disease.

Sex does not appear to influence very much the occurrence of Pott's disease. Age is, however, an important factor. Whitman, in his work on orthopedics, published statistics which show that, although the disease can and does occur from earliest infancy to advanced old age, the great majority of cases are met with between the ages of one and ten years, and the proportion steadily diminishes from that point up.

Although the disease may attack any vertebra, it is more frequent in the dorso-lumbar region, and fortunately rare in the cervical region. In a series of 1355 cases from the Hospital for Ruptured and Crippled (New York City), the distribution was: Cervical, 100; dorsal, 854; lumbar, 317; lumbo-sacral, 13; no deformity, 55; two separate foci, 16.

As a causative factor, it is pretty generally conceded that exter-

nal violence plays a most important role, usually associated with a strumous diathesis or inherited tuberculous taint.

The greater proportion of cases occur in those who occupy the humbler walks of life, where overcrowding, with its attendant bad hygiene and poor food, render them more susceptible to tubercular invasion.

While the positive diagnostic point of Pott's disease is the characteristic deformity, and this was at one time thought essential for a diagnosis, we now know that the occurrence of this is the result of a diseased condition which has probably existed for some months, and which may, by careful and repeated examinations, be detected long before it has reached the destructive stage.

We are all familiar with Pott's disease in its later stages, marked by the characteristic deformity and attended with impaired health, muscular atrophy and weakness, and abscess formation. My object to-night, as I have stated, is to attempt to emphasize the diagnostic symptoms present in its earlier stages, when a correct diagnosis and recognition of the condition means so much to the patient, and when the disease is so seldom recognized.

If we remember the mobility of the spinal column in health, allowing comparative freedom of motion in all directions, and that the disease occurs in the bodies of the vertebræ, we are not surprised to find that restriction of motion and pain are the first symptoms present and remain constant during the course of the disease. This stiffness is due to a reflex spasm of the muscles located in the affected area, and act as a splint to protect the diseased vertebra. When associated with these symptoms one finds an undue prominence of one of the spinous processes the diagnosis can be made with a considerable degree of certainty, especially provided the history of the case or the age of the patient precludes the presence of some other disease to account for the symptoms. Associated with these symptoms, even at this early period, will be noticed the peculiar attitudes assumed by the patient in carrying out the various movements of daily existence. The spine is held rigid, the walk is affected, the knees partly bent and the steps taken deliberately; and when sitting, especially if the disease is located in the dorsal region, the weight of the body above the diseased area will be removed by using the arms as a support. Wry-neck and

lordosis with undue prominence of the abdomen, is also seen when the focus is in the cervical or lumbar regions.

Pain, though usually present, is by no means a constant symptom, nor is it localized over the point of infection, but is referred to the distribution of the spinal nerve involved in the inflamed area.

Paralysis also occasionally occurs early in the disease, and is often present before the deformity has attained any size. When present it is associated with the other early symptoms, and usually easy to diagnose.

The histories of these cases are to a certain extent similar. In the majority of instances the child, from a condition of good health, becomes cross and fretful, tires easily, and is inclined to lie down after short intervals of play. The general health is impaired, digestive disturbances occur and pains of an indefinite nature are complained of. The condition gradually becomes worse and medical advice is sought. After eliciting as complete a history as possible of the duration of the symptoms, possible traumatism to the spine and tuberculous inheritance, we proceed to the physical examination without which an early diagnosis is an impossibility. The patient must be stripped of all clothing, any peculiarity of gait or attitude noted, and made to pick up objects from the floor. Even in the earliest cases where no deformity has occurred, close observation will show some restriction of the freedom of motion of the spine. Our patient is next placed flat on the table, face down, and the spinal column carefully palpated throughout its entire length. Any undue prominence of one or more of the spinous processes will in this manner be detected as well as any lateral deviation, an early feature in some cases. Next the flexibility of the spinal column is tested in its different regions and any restriction of motion is easily detected, the patient, as a rule, complaining of pain during these manipulations. In early cases we usually find some loss of mobility of the spine associated with pain of more or less intensity during the manipulations, together with a posterior projection, usually rather small, or a sharp angular lateral deflection. With this group of symptoms taken in conjunction with the history, one can as a rule be justified in making a diagnosis of Pott's disease, and an X-ray of the spine at this point will usually show the tubercular focus in the body of the diseased vertebra.

As an illustration of the above I wish to report the following case:

G. E., white male, age 21 months. Was first seen on December 14, 1905. Has always been fed on cow's milk and always rather a delicate child. Has not suffered from any of the acute infectious diseases common to this period of life. Tubercular family history is negative, mother and father both living and in good health. He is the first child. No history of traumatism to the spine. General condition is good and child fairly well nourished. No symptoms of rickets present. Has had no pain or suffering.

Last June, six months ago, father first noticed a lump and curve in the lower portion of the back. This has apparently remained stationary as far as he has been able to judge.

Upon examination a distinct lump is seen situated in the left lumbar fossa, and apparently caused by a twisting of the ribs. There is also present a distinct and well defined lateral angular deflection of the spinal column, situated in the dorso-lumbar region.

The convexity is to the left. No sensitiveness on pressure is present. The child walks well for his age but seems loath to do so, probably on account of the surroundings and the presence of strangers.

Mobility is practically absent in this portion of the vertebral column, the back coming up like a board when the legs are lifted from the table, and some pain is complained of during these manipulations. Lateral flexion is also interfered with and likewise elicits pain. Case is diagnosed as dorso-lumbar Pott's disease, the probable seat of infection being in the last dorsal or first lumbar vertebra. Plaster of paris jacket applied and the parents instructed to return in about six weeks.

January 29, 1906. Child returns to-day for a change of the cast. Child has had no pain whatever since the first two weeks following the application of the cast, during which time, however, he was very miserable, and really "seemed to be made sick by it." Cast removed. Lump has disappeared and the lateral curve very markedly diminished. There is, however, now seen a marked prominence of the spinous process of the first lumbar vertebra. Flexion of the spine is not as much interfered with as was formerly the case. New cast applied.

March 27, 1906. Returns to-day. Cast removed. Prominence of the spine still noticeable. X-ray picture taken and new cast applied. X-ray shows an early stage of Pott's disease located on the lateral aspect of the body of the first lumbar vertebra, with a distinct lateral angular curve.

May 10, 1906. Cast changed. Condition of the spine about the same, but the general health markedly improved, the child rosy and fat.

From this date, at intervals of about six weeks the casts were changed, and it could be noticed that the posterior projection gradually diminished until by November 17, 1907, it was no longer visible upon inspection. The same treatment was continued until January 17, 1908, when the child was measured for a Taylor brace. This was fitted to him on January 30, and he was discharged as cured, with instructions to the parents to keep this on continuously for a year and then bring him back for inspection.

His condition when discharged was excellent. He had steadily grown, remained in perfect health throughout the entire treatment, and, with the exception of the first two weeks, had suffered no discomfort from the treatment. The pain and discomfort at that time was probably due to the pressure upon the distorted ribs, which resulted in a restoration of them to their normal position and an obliteration of the deformity they had produced.

Picture to yourself the result obtained in this case and you will readily appreciate the advantage of an early diagnosis and correct treatment.

The X-ray shown you was taken late in the case, and shows the deformity very well. Our earlier plates have faded and I was unable to obtain a satisfactory print from them.

Pott's disease is occasionally confused with some one of the following affections, from which, however, with a little care and patience it can be differentiated:

Lumbago.—This is an acute affection usually of adult life and sudden in its onset. The muscles are painful and sensitive to pressure.

Strain.—Usually sudden in onset and traumatic in origin; the pain is localized and is relieved by rest. In Pott's disease, on the contrary, the pain is neuralgic in type, often worse at night, and the stiffened muscles can be pressed upon without discomfort.

Sciatica.—Usually unilateral, confined to the distribution of this nerve, and movements of the leg aggravate the condition. Motion of the spine is barely restricted, if at all. In Pott's disease the reverse is the case. The pain is, as a rule, bilateral, is not affected by movement of the limb, and the spine is always stiff.

Hip Disease.—In this condition the movements of the affected joint are restricted in all directions. In Pott's disease the limp and pain are due to Psoas contraction, and hyperextension of the hip is the only motion interfered with.

Rickets.—The contour of the kyphosis in this disease is less angular in outline, the muscles are not stiff, and usually other manifestations of the condition are present.

Rheumatic Torticollis.—Very difficult to diagnose from cervical Pott's in its early stages, and frequently only time and treatment will clear the diagnosis.

Passing on to the treatment, it is interesting to note that the principles and methods employed at present vary only in slight respect from those used by the earliest physicians. Hippocrates, 500 B. C., was opposed to the forcible correction of deformity in hunchbacks, the present attitude assumed by the medical profession in most cases. Paré, in 1575, designed and used in the treatment of his cases a steel cuirass which differs very slightly in mechanical construction from some of the corsets now used.

Rest and limitation, or rather restriction of motion, is the point aimed at, and the more effectually this is obtained the more satisfactory will be the result. The two methods employed are rest in bed in recumbent position, and fixation of the spine by means of a plaster of Paris jacket or a spinal brace. In the majority of cases the latter method is best, as it, when properly applied, fixes the spine and at the same time allows the patient to lead an out-of-doors life, as necessary in this as in any other form of tuberculosis. In certain cases, however, those in which the disease progresses rapidly and pain is present in spite of our jacket or brace, and also in a very young patient in which the bony pelvis is too small to afford an efficient support, we must resort to the recumbent position. When this is necessary the apparatus evolved and described by Bradford is by far the most satisfactory, and allows the patient to be moved about with absolutely no discomfort.

This treatment must be rigidly adhered to and the patient kept in this position until the progress of the disease has been arrested. When the cervical region is involved, extension to the head and counter-extension applied to the feet by weight and pulley must be resorted to during recumbency.

Plaster of Paris in the form of a jacket in the treatment of Pott's disease was first used by Louis Sayre in 1875, and its employment in these cases has become more and more general, until at present it is practically universally adopted, especially during the active stages of the disease. It has a great advantage over all braces in being a fixed dressing accurately applied by the physician and remaining in place. To be effective it must fit securely around the pelvis, the bony prominences of which have been well padded and extend as low down as is compatible with a sitting posture. Above it must extend to the arm pits and even enclose the shoulders in those cases in which the disease is above the ninth dorsal vertebra. When the disease is located in the upper dorsal or cervical vertebra the head must also be incorporated in the bandage. The bandages are applied smoothly over the body, either in suspension or recumbent, and slightly hyperextended, protected by a seamless gauze under vest or knitted stockinet, and the successive layers rubbed firmly together in order to make a homogeneous and durable cast. The cast should in our climate, especially in summer, be changed every ten to twelve weeks, so as to give the skin a thorough cleansing and guard against pressure sores.

In the use of a brace the same principle is carried out. The brace, of which Taylor's is the best, acts as a lever, the fulcrum situated at the site of the diseased vertebra. The arms extend above and below, and are fastened at intervals to an apron of inelastic ducking shaped to fit over the chest and abdomen. The brace at its lower extremity is attached to a pelvic girdle which reaches partly around the body. This is connected by a wide inelastic belt across the front, and when accurately adjusted can be made to attain a firm hold on the pelvis. The steel uprights must be accurately fitted to the contour of the spine, wide enough apart to allow the projecting spinous processes to pass between, and well padded. When the disease is high up in the spine appropriate apparatus must be used to support and limit motion in the

head. The brace, while it has the advantage of allowing easy removal and daily bathing of the patient, has the disadvantage of requiring after removal an accurate readjustment, for if this is not the case its efficiency is destroyed, or at any rate impaired. Personally I very much prefer the plaster corset in the treatment of Pott's disease, especially during the active stage. When convalescence has set in and the disease been stationary for a considerable time, the substitution of a Taylor brace can do no harm, and is always a source of great comfort to the patient.

The prognosis of Pott's disease is always grave. It is the most serious of all tubercular lesions of the bone and joints, chronic to a degree, and likely to recur years after an apparent cure. Statistics show that about 20% of all cases die during the progress of the disease, or within a few years after its onset; either from dissemination of the tubercular infection, meningitis, sepsis, or intercurrent diseases rendered far more fatal as a result of the impaired health.

In conclusion, the following quotation from Whitman seems particularly appropriate: "It is a matter of common observation that few of those who are markedly deformed reach an old age. On the other hand it may be assumed that slight deformities or those which do not as directly interfere with the vital functions, exercise but little influence upon the future well being of the patient. This emphasizes the importance of an early diagnosis and efficient treatment."

Tuberculosis in Infancy and Childhood.*

By W. W. BUTTERWORTH, M. D., New Orleans.

The literature upon tuberculosis in early life is of so enormous a volume and the observations, experiments, facts and theories contained therein are so multitudinous and yet so divergent in their views, that it becomes a difficult task to form rational and satisfactory conclusions. The subject contains many disputed and unsettled questions, to which the final answer must still be awaited.

FREQUENCY OF TUBERCULOSIS IN INFANCY AND CHILDHOOD—In the ten years, from 1890 to 1900, 8,051 children under fifteen years of age died of tuberculosis in the United States. That the

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disease is common in childhood has long been known; perhaps it is more frequent than has been generally supposed and from the immense number of autopsies reported, important conclusions have been drawn relative to the frequency of tuberculosis in early life.

Cornet (1) analyzed the post-mortem records of the Berlin Pathological Institute from 1876 to 1891 as to the relative number of deaths from tuberculosis in infancy and early childhood; he failed to find tubercular lesions. In 486 autopsies of infants ranging in age from birth to ten months:

In 33 cases, from 2 mos. to 3 mos. of age, it was twice present, or 6%.
 In 76 cases, from 3 mos. to 6 mos. of age, there were 8 cases, or 10.5%.
 In 88 cases, from 6 mos. to 9 mos. of age, there were 14 cases, or 17%.
 In 65 cases, from 9 mos. to 12 mos. of age, there were 18 cases, or 27.7%.
 In 311 cases, 1 year to 2 years, 83 times, or 26.0%.
 In 189 cases, 2 years to 3 years, 56 times, or 29.6%.
 In 160 cases, 3 years to 4 years, 15 times, or 31.8%.
 In 134 cases, 4 years to 5 years, 30 times, or 22.4%.

Simmons (2), Schwer and Balz, in 2,609 autopsies on children, found the following numbers at various ages:

Age.	Number of Cases.	Number Tubercular.	Per Cent.
Under 1 year.....	1,438	64	4.5
1 to 5 years.....	781	230	29.3
5 to 10 years.....	228	78	35.0
10 to 15 years.....	162	56	34.6

Still (3), of London, England, in 1899, reported 769 post-mortems under 12 years of age and found tuberculosis present 269 times, or in 35% of the cases.

In 1902, Hands (4) reported 332 autopsies from the Children's Hospital of Philadelphia, of which number 115 cases showed tuberculous lesions, or 34.3%.

The statistics gathered by various observers in several countries are surprisingly uniform in their percentages and warrants the conclusion that tuberculosis is extremely rare in the newly-born, is uncommon during the first twelve months of life and increases in frequency thereafter from month to month during the first year of life and from year to year throughout early childhood.

NATURE OF THE TUBERCULOSIS PROCESS IN INFANCY AND EARLY CHILDHOOD—Recent studies (5) have emphasized the great difference in the pathology of tuberculosis in early life from that of the

adult. Tuberculosis in the first-named period of life is essentially a disease of the lymph-nodes. Tuberculous adenitis represents the chronic tuberculosis of childhood, as the pulmonary form represents the chronic of the adult.

Autopsies on 2,557 children show tuberculous involvement of the bronchial lymph-nodes in 98%, the mesenteric lymph-nodes in 36% and of the cervical lymph-nodes in 30%.

The reason (6) why glandular tuberculosis is more common in early life than that of the lungs, is due primarily to anatomical and physiological conditions peculiar to the first years of life; the mucous membranes are more easily penetrated and the lymph spaces are larger than in adults. In the latter, the tubercle *bacilli* are more likely to cause a local process at the point of entrance, while in children the *bacilli* do not usually cause demonstrable primary lesions of the mucous membrane, but localize themselves in the lymph-nodes. Here they set up a chronic process which is one of defense. And in proportion to the completeness of the protective reaction, the *bacilli* are either prevented from multiplying and are encapsulated and may remain latent for years, or they multiply and cause a local degenerative process in the gland and later they may be carried into distant parts of the organism through the lymph or blood channels.

In the first mentioned condition, there are no clinical manifestations other than a slight degree of enlargement of glands.

When a local degenerative process occurs in infected lymph-nodes, we have various disturbances of nutrition and oftentimes fever. Should a few tubercle *bacilli* escape into the blood or lymph streams, we find various pathological states depending upon the individual resistance to further infection; thus, if tissue reaction is prompt and efficient and limits their further activity, a local process occurs, such as tuberculosis of the bones or the solitary tubercle of the brain or liver.

Failing in this limitation of infection, a general infection occurs, which presents protracted and irregular manifestations of fever and impaired nutrition and, during the early stage of the condition, may be mistaken for typhoid fever.

A more acute phase of general tuberculosis often follows the establishment of a vascular nidus from which there is a constant supply of *bacilli* into the blood stream, and this is believed by com-

petent authorities to occur more frequently than the outpouring into the circulation of *bacilli* from a broken-down gland rupturing into an adherent lymph or blood vessel.

SOURCES OF INFECTION.—May be several. Wound infection is rare in infants and children and has resulted chiefly from vaccination and ritual circumcision.

Baumgarten (8) advances the theory that tuberculosis is always of extra-uterine origin, due to placental infection. That it does occur in a very limited number of cases is true (9). The mother is usually in an advanced stage of the disease and the child is either still-born or dies soon after birth.

To what extent the milk of tuberculous animals contribute to the dissemination of the disease among infants and children, is still a matter of discussion. Behring asserted that at whatever age and in whatever clinical form tuberculosis manifested itself, it was always due to milk infection occurring in infancy. In 1901, R. Koch, at the British Congress of Tuberculosis, stated that the milk of tuberculous animals does not infect human beings. The weight of opinion is that both views are wrong and extreme and that while bovine *bacilli* do produce tuberculosis in human beings, it is very far from being a frequent source of infection, and that an exaggerated opinion has been entertained in this respect. Holt's (10) illustration of this phase of the subject is very suggestive.

Flugge (11) says that one of the most common ways in which tuberculosis is transmitted is due to the fine moist droplets expelled in coughing while Cornet (12) believes that the principal source of infection is from the dried sputum and that it is a dust infection.

Tuberculosis is often transmitted by direct infection. Demme (13) reports the following instance: Four infants died in succession of primary tuberculosis of the intestine while under the care of a nurse who was suffering from tuberculosis of the jaw with a fistulous opening into the mouth. It was found that the nurse was in the habit of placing the food for the infants in her own mouth before giving it to them.

Another equally startling instance is that of Reich's (14), where, in a village of 1,300 inhabitants, the obstetrical practice was divided between two midwives; within fourteen months ten infants died of tuberculous meningitis. These deaths occurred in the

practice of one midwife who was found to be suffering from pulmonary tuberculosis and who died from the same disease. She practiced mouth to mouth aspiration to remove the mucus from the mouth of the newly-born and blew into the nose to establish respiration. None of the families of the unfortunate babies were tubercular, neither did any cases occur in the practice of the other midwife. Examples are only too numerous of children contracting the disease from nurses and other persons in the household. The promiscuous kissing and fondling of infants and young children is a constant and very real danger.

There is no one exclusive source of tubercular infection in early life. And the conclusion is forced on us that the more an infant comes in contact with his surroundings, the greater the liability to tuberculosis; while in the cradle he is practically protected, in a few months he begins to crawl about on the floor, placing all sorts of things in his mouth and inhaling infective dust—all of which mean increased opportunities for infection. Experiments show that the floor is the part of the room which is the seat of greatest infection—the significance of this is further enhanced by observation of Preisich and Schultz (16), who report that in the examination of the dirt from under the finger nails of 66 children, varying from six months to two years of age, taken at random from a children's clinic, that they found virulent tubercle *bacilli* in fourteen instances or in 21.2%.

The weight of modern opinion is in favor of regarding infection from immediate surroundings—"house infection"—as the chief source of tubercular infection in the very young.

CHANNELS OF ENTRY—The avenues of infection are the maternal circulation, the skin, ear, eye, urogenital tract, respiratory and intestinal tracts.

It is the last two of these that are of chief interest, for while the first named are recognized routes of infection, it occurs so infrequently that we can dismiss them without further consideration (17). In the present state of our knowledge, it is difficult to determine the portal of entry since it has been clearly shown that it mattered not from what point the tubercle *bacillus* was introduced, it could eventually reach the bronchial glands and lungs without being any evidence of its means of entrance. It is probable that in infancy the convenient portals of entry are the lungs,

the tonsils and the naso-pharynx and the intestines. Corresponding with these three portals of entry, we find primary involvement of the bronchial, cervical and mesenteric lymph-nodes.

THE DIAGNOSIS AND PROGNOSIS OF TUBERCULOSIS IN INFANCY AND CHILDHOOD—In early life the diagnosis of tuberculosis is difficult and it is in this class of cases that the tuberculin reaction is helpful. The net results following the subcutaneous injection of tuberculin for diagnostic purposes have been followed by disastrous consequences and this method has given way to the more rational method of vaccination and the more recent ophthalamo-tuberculin test. The latter has much to be said in its favor and in our hands has given satisfactory and trustworthy results. It promises to be a distinct gain in diagnosis.

Holt (18) in 67 cases of pulmonary tuberculin in children under two years of age has made the diagnosis by the examination of the sputum in 80% of the cases when, according to the physical signs, the disease was not far advanced. His method of obtaining the sputum consists in having a swab convenient and nearby when the child has a paroxysm of coughing, the sputum is caught on the swab and smears are made as usual.

D'Espuie (19) believes he has found a valuable method of diagnosing enlargement of the bronchial lymph-nodes by auscultating the voice. In a normal child the tracheal tone stops abruptly at the cervical spine, but with a pathologic process in the lymph-nodes it extends further downwards. Dullness on percussion of the seventh cervical or first dorsal spine is a later sign, as are intracapsular dullness and the bronchial souffle.

Gibson has called attention to venous dilatation over the chest, neck and shoulder, tending to converge above the sternum, as a valuable sign.

A most important addition to our diagnostic resources is the X-Ray. Suggestive symptoms are early wasting without adequate cause, followed by the gradual development of low fever and the appearance of signs of a broncho-pneumonia and finally in a certain percentage of cases a secondary meningitis completes the clinical picture.

Such cases may run a very acute course. Very recently we had in Ward 61 of the Charity Hospital a nursing infant who was admitted with a broncho-pneumonia, gave a positive ophthalamo-

tuberculin reaction, developed meningitis one week before death, which occurred 34 days after first evidence of illness. Post-mortem showed a tubercular broncho-pneumonia and tubercular meningitis.

In tubercular broncho-pneumonia apex systems are negative in children, the tubercular process may begin at the base or root of the lung and the closest examination of the lung may reveal little or nothing characteristic.

The most valuable indication is the great irregularity in the temperature range and marked evidence of loss of flesh and strength. Cough may not be present and the cracked-pot resonance is of no value in children.

Hamburger and Slicka, whose figures are based on 2,557 autopsies on children under fifteen years of age, found that in all those cases in which tuberculosis was found in infants under six months of age, that it was the direct cause of death; and in children in the second six months it was the direct cause of seventy-five per cent. Over two years of age, it is much more infrequently the direct cause of death. They also found absolutely no evidence of any tendency toward healing in the first two years of life.

In children, chronic tuberculosis of the lungs is much more rapid than in adults and they rarely survive longer than a year.

There is much to be said concerning the prophylaxis and treatment of this condition in the very young and this will be presented in a future paper.

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Tuberculosis of the Skin.*

By DR. H. E. MENAGE, New Orleans.

The subject of tuberculosis of the skin has grown to such large proportions recently, as to deserve more than the passing notice to be given it on this occasion, but I shall only be able to touch generally upon the subject taking up the commoner dermatoses of tuberculous origin with their clinical appearances, differential diagnoses and with a few words on their etiology, leaving the rest, as best it may, to come out in the discussion.

The term "tubercular" is one so often misunderstood outside of the dermatologic clan that I believe it wise to take advantage of this occasion to prelude what is to follow by a definition of the term as understood by the dermatologist. We define as tubercular diseases of the skin, those diseases characterized by the tubercle, an elementary lesion which is solid, usually clearly circumscribed, rounded, pea-size, or much longer, somewhat deep-seated elevation, generally of a persistent character and bearing clinically a close resemblance to the papule. It can be considered as an intermediate or merging lesion between a papule and a small tumor. The tubercle consists of a cellular infiltration and is usually neoplastic—leprosy, types of syphilis, etc., are examples of tubercular diseases of the skin, but in these instances the term tubercular refers solely to the form and general character of the lesion, and not to its nature as a product of tuberculosis.

Tuberculoses of the skin are divided at this date into two general divisions: First, those due to the direct local inoculation of the skin by the bacillus of tuberculosis and its presence in that structure; and, second, those eruptions due to the circulation of toxins in the blood from remote focuses of infection by that organism—in the latter case no bacilli being demonstrable in the lesions themselves. These eruptions could very well be classified as toxic

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erythemas, but for Darier, who gave us a masterly and elaborate description of them as "tuberculides."

Let us begin with lupus vulgaris, probably the most common variety of tuberculous invasion of the skin. I shall here beg off from entering into the interminable discussion, begun a long time ago, and still under way, as to the identity or dissimilar nature of lupus erythematosus, or butterfly lupus, with lupus vulgaris and classify the latter disease, for convenience sake, with the tuberculides.

Lupus vorax, as the name suggests, "a wolf," is a destructive disease of the skin which spreads peripherally by gnawing, as it were, its way through the tissues. The symptoms of lupus vulgaris are both numerous and diversified, a fact which may account for the many names which have been applied to its different manifestations and which, with a few exceptions, are descriptive only of certain of its external features. A typical case of nodular lupus is easy of diagnosis and begins usually on the face, especially the cheeks and nose, and nearly always during childhood. The lupus infiltrate may be limited to small areas or diffused over an entire region of the body. It may begin as a small bean-size macule (*Lupus Planus*) or again as a pinhead or bean-size nodule (*Lupus Nodosus*) deeply seated in the skin and usually not much elevated above its surface and sometimes to be felt only when the skin is picked up between the fingers. These nodules or tubercles gradually grow in size and have a semi-translucent aspect under the stretched epidermis and a brownish hue so aptly compared by Hutchinson to "apple jelly." In the course of time, sometimes years, these nodules, coalesce by individual extension into dull red patches; distinctly raised above the surface, soft and elastic to the touch, with somewhat more resistance at their border which is raised more or less nodular and translucent. The disease about this stage usually assumes one of two of its most common types—the dry scaly lupus or the ulcerating lupus or lupus exedens.

When the nose is involved the whole thickness of the soft tissues may be affected as well; ulcerating and fungating, the granulations are covered by brownish crusts and although the organ may be much swollen the general outline is long preserved, and it is not until these granulations are removed that the full amount of destruction can be realized. The disease may ultimately destroy

the cartilages and even, in rare instances, the bones themselves may succumb. When cicatrization occurs and is complete the nose presents a most typical pointed, peaked appearance called by the French the "Parrot's Bill." Lupus does not confine itself to the skin only, but affects, with equal avidity, the mucous surfaces, the mouth, the tongue, the larynx, the conjunctiva, the vagina, and, in rare instances, the uterus itself is involved. When the mouth is involved granulating sores form on the inside of the lips, and on the gums, generally project over the upper teeth; papillary growths are more common here than elsewhere and often separate the gums from the teeth; stomatitis is more or less present, producing superficial grayish patches similar to those so often seen in syphilis. Punched-out ulcers on the hard palate are frequently seen, but cavities of the bone hardly ever ensue, the condition being notably different in this respect from syphilis. The whole of the interior of the larynx may be involved in the process, the voice may be affected in varying degrees, but as a rule, according to Crocker, no danger to life, nor destruction of the cartilages need be apprehended.

Leloir gives the following as the modes of inoculation of the skin by the organism, viz.: First, directly from without; second, by extension from deeper tuberculosis foci; third, by extension through the lymphatics and veins; fourth, through the blood; fifth, in utero.

The number of ways in which lupus has been transmitted are innumerable; by kissing, by tattooing, ritual circumcision, piercing the ears, in laundry women by washing linen of tubercular patients, butchers handling tubercular meats, etc. When lupus originates from external inoculation it most frequently develops in the form of the venucose type, but the classical nodular or tubercular type may develop from such inoculations, although it is most likely to follow infection from within; in the strenuous and cachectic the ulcerative and destructive types prevail, while in the strong and robust their greater resistance gives rise to the non-suppurative scaly, mild picture, so to speak, an abortive type of the disease.

The diagnosis of lupus presents few difficulties except in the atypical varieties when it becomes necessary to resort to other means, than the classical picture and history affords, to clear up the diagnosis.

The history of the case, the disease beginning early in life, its chronicity and the presence of the characteristic apple jelly, reddish-brown colored readily broken down tubercles are not easily misinterpreted. There are several ulcerative processes, however, that at times bear a close resemblance to lupus. The tubercular and serpigenous syphilides are especially to be differentiated; lupus begins early in life, and is apt to be definitely localized, syphilis, as usually seen, dates from adult life, and the lesions are more widely dispersed; lupus is chronic in its course, syphilis much more rapid, doing more mischief in fact in six months than lupus does in six years, or, as Payne has put it, to quote Hardaway, "Lupus is to syphilis as the hour hand is to the minute hand of the clock." Lupus nodules often are set deeper in the skin, are reddish brown, and readily break down, the tubercles of syphilis are pinkish red, firmer in consistency and less irregular in outline. Lupus tubercles often redevelop in the scar left by the disease, while the tubercles of syphilis rarely, if ever, do so; the secretion from lupus ulcers is scant and inodorous, from syphilis, purulent, abundant and offensive; the crusts of lupus are thin and reddish, the crusts of syphilis, thick, greenish-black and may have the time-honored oyster shell appearance. The scars of lupus are thick, band-like and adherent, in syphilis they are thin, soft and movable. The bones are not usually implicated in lupus, they are commonly involved in syphilis. The circinate, horseshoe, bean-shape, kidney-shape outline so classical of a late syphilide is entirely lacking in lupus which spreads irrespective of marginal configuration. Blastomycosis also falls in line to be differentiated from lupus of the venucose hypertrophic type. The history of the case again helps, with the selective location upon the lower lids and consequent ectropion, the peripheral miliary abscesses, the patient's occupation and the section of the country from which he hails all favor Blastomycosis in preference to lupus. Naturally in very obscure cases the microscope would settle the issue beyond doubt. Epithelioma at times may be a source of confusion, but here again we bear in mind the diagnostic features of lupus; epithelioma is unusual in early life—lupus, as a rule, has several points of ulceration with intervening lymph nodules, in epithelioma the ulceration begins at a single point and has no characteristic elementary lesion. the ulcer of lupus is more superficial than that of epithelioma, its

borders are soft and pliable as compared with the deep, hard everted edges of the epithelioma, but it must be remembered at this juncture that many cases of epithelioma have developed in old lupus scars and that we may have both diseases simultaneously present making a differential diagnosis almost impossible at one sitting.

The diascopé is always a valuable aid in differentiating lupus infiltration from inflammatory tissue, pressure with that instrument reveals the characteristic color of the lupus tissue while the inflammatory tissue loses all its color through the mechanical anemia produced. Lastly inoculation or vaccination with the ophthalmic test solution of tuberculin, if invariably to be relied upon as effective and harmless, will prove to be our most valuable differential test in all eruptions suspected to be of tuberculous origin directly or due indirectly to derived toxins.

Tuberculosis verrucosa, tub. ulcerosa, tub. disseminata and scrofuloderma are the several other varieties which might be taken up in this connection, but which we will omit for brevity's sake and go on to the second part of the subject.

Tuberculide is the name proposed by Darier to a whole series of cutaneous manifestations observed in tuberculous subjects or subjects with tuberculous tendencies and which do not seem to be related to any other known condition. Among them, lichen scrofulosorum, *folliculis*, acnitis, acne cachecticorum and lupus erythematosus, etc., may be named as examples. The subject of common pulmonary tuberculosis is not usually the one upon whom flourish tuberculides, it is in the subject of chronic, slowly-progressing localized types of the disease that the tuberculides seem more prevalent. In some instances the clinically active manifestations of tuberculosis follow the appearance of the eruption which is taken to mean by many observers that eruptions of the tuberculide type may be an early diagnostic sign of latent or hidden tuberculosis. Symptomatically tuberculides are eruptions which appear without fever, but suddenly and by outbreaks continuous or intermittent. The eruption is most often symmetrical with a predilection more or less marked for certain regions of the body, according to the variety presenting.

The lesions are disseminated, or grouped in variable numbers, of a red or violaceous color; they vary in size from a small papule

or pustule to large nodosities or extensive patches. Each lesion may last several weeks or months after which it may be absorbed and disappear without atrophy of the skin, or again necrosis may follow and permanent scar result. It is common to see several varieties of tuberculides appear during the one outbreak, or different forms at each successive outbreak in the same subject. From the diagnostic standpoint it is fair to say, I believe, that given an obscure eruption not clinically classical of any recognized disease of the skin in a tuberculous subject or one in whom tuberculosis is suspected a positive reaction to the tuberculin test preferably the ophthalmic one, we can safely classify that eruption among the tuberculides.

Before closing, a few words on the subject of prophylaxis will not be amiss. A lupus subject may not only convey lupus as such to another victim by direct inoculation, but may be the responsible source for a general and visceral type of the disease. When possible the lesions of lupus should be protected and the dressings either sterilized or destroyed by burning; the hands of those who come in contact with the patients should be washed soon afterwards. Due care should be exercised to prevent inoculating the mucous membranes of the body, particularly that of the nose, mouth and conjunctiva. The attendants upon a case of lupus or those living in the house, suffering from acute or chronic inflammations of the naso-pharynx should exert all possible care to prevent infection and attempt to restore their mucous membrane to a normal condition as promptly as possible. Cleanliness after contact with tuberculous material is positively the best prophylactic measure to be remembered and accounts for the small percentage of local tuberculosis found in medical students, operators and pathologists who come in contact so promiscuously with the tubercle bacillus.

Louisiana State Medical Society Proceedings.

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1908 MEETING.

Possibilities of Medical Organization.

By OSCAR DOWLING, M. D., President, Shreveport, La.

When Chauncey Olcott was living in Buffalo several years ago, so I heard him say once when making a curtain speech, he had made for himself no little reputation as an entertainer on the platform, his forte lying especially in appealing to and in entertaining the children. Now, one of the "fresh air" organizations of that city was planning to give an outing for "Young America," plus a small part of Canada, and in looking around for some one to make them a short speech, decided on Chauncey. He accepted the invitation, though, with the customary protests, excuses and assurances of inability. All of us great speakers do that.

However, he was on hand at the appointed time and place, joining heartily in all the merriment and fun. Finally, the hour for *his* part of the performance having arrived, the master of ceremonies came over to where he was sitting, slapping him on the shoulder and said, "Olcott, these children seem to be having the happiest time of their life; shall we let them go on enjoying themselves, or will you make your speech now?"

I am in precisely the same quandary as that into which the famous comedian found himself thrust without the slightest warning; I don't know whether to let you go on and enjoy yourselves, or to make you a speech. You'll notice, though, I said *I* am in the quandary; I could guess, if I would—but I won't—which course would prove the more agreeable to you for the next hour and thirty-seven minutes—a duration of time which, barring any unnecessarily prolonged evidence of approbation and enthusiasm on your part (for which I thank you in advance) should possibly suffice for my making a limited exposition of my ideas on the "Possibilities of Medical Organization."

But, really, I'll have to tell you in the outset—the proof therefor will be forthcoming presently—that I am not a talker; I was not trained for that business. Yea, verily, by precept and example was I taught otherwise. My mother effectively discouraged any tendency in that direction; with minor admonishing applications she suggested fewer words and more errands. My teacher quelled the rising inclination for verbosity; she kept me in after school for even whispering. And in later years my young lady friends cut short any local loquacity; they did all the talking themselves.

“Train up a child in the way he should go; and when he is old he will not depart from it,” is the way King Solomon looked at the youthful proposition and he ought to have known what he was talking about 'cause he had several gross of wives. I was trained not to talk, and told not to talk and didn't talk, yet am now scheduled for a speech. And it's all because of a custom; every president has to make at least one speech in his official career. It is generally delivered, I believe, at the close of his administration—I am referring of course to this particular State Medical Society—but now whether he makes that speech because he knows he is not going to be re-elected and wants to even up matters, or is not re-elected because he makes the speech—“aye,” quoth my friend Bill of Avon-side, “there's the rub!”

Happily enough, doctors are not expected to be orators; I mean platform orators. Aesculapius was a medical man of the first brand—in fact he knew so much about the business that the “Father of Gods and King of Men,” fearing least mortals might escape death altogether, dispatched him with a thunderbolt—but, though we hear of him in other lines, never a word is said of his making a stump speech. That didn't lie in his sphere. “Words sweeter than honey flowed from Nestor's mouth”; Demosthenes spoke with vehemence and power; Cicero was a past master of scathing language; Burke combined logic and eloquence; Webster debated with startling clearness and conviction, and Bryan justly merits the title of “Silver-tongued”; but with all their ease and beauty of speaking not one has yet uttered a sentence that can compare in real eloquence and sweetness with the laconic expression of the family physician as he daily stands beside the stricken one and says: “Don't feel uneasy; you'll pull through.”

All of which leads us to my first opportunity of waxing eloquent. I have that very message for you to-night and really rejoice in telling you that even though I am going to make a speech, "don't feel uneasy; I think you'll pull through." If you find you can't "pull through," why then you are at liberty to pull out.

On my former visits, but never more than at present, I have been forcibly impressed with the progressiveness and general business activity of Alexandria. Dealing mainly in lumber, cotton and the allied products, sugar and syrup, she has won, and justly merits it, a commercial ranking that must be very gratifying. Her railroads radiating to the four points of the compass place her in an advantageous position, while the Red River at her very door affords still another outlet. The excellent government buildings show what the high officials think of these people; the well constructed schools indicate what they think of their children, and the magnificent banks show, to a certain degree, how well they are succeeding in the world of business activity. They evidently like to have their visitors nicely housed, too, for they are just now completing a thoroughly modern hotel at an expenditure exceeding half a million dollars. Undertakings of such magnitude as this can reflect only credit and praise for the conservative principles and solid foundation of any commercial center, especially when we take into consideration the embarrassing financial condition of so recent a date.

And that hospital for the insane over yonder—a model institution it is in every respect, but for the life of me I fail to see the point in locating it here, of all the places that may have made a bid for it. Perhaps it is on the basis of health and moral environment for the guests; I notice Alexandria doesn't believe in patronizing home industry.

The doctors of this town are an honor to the profession. They are men imbued with the spirit—not the spirits, mind you—of the times; the spirit which is dominating the citizens and establishing Alexandria in the advance guard of the twentieth century towns; the spirit which engenders discontent with the existing status and instigates a desire for better; the spirit which gives determination to the faltering and strength to the weak—in short, Ambition and Energy. I like to think of them as standing, Ben

Hur like, in the chariot of Knowledge, drawn by the unfailing steeds, Ambition, Rosolution, Energy and Perseverance, and as having already distanced their Messala on the race course of life before the amphitheatre of the world. Not all of us have Messalas of like strength; the race for one is oft times harder than for another; but, be that as it may, difficult or easy, Alexandria's doctors have not lagged behind the field.

Her men are brave and chivalrous, her matrons handsome and charming, her maidens beautiful and "sweet as the rosebuds of the morning dew, fanned by the gentle breezes of an angel's wings," and they, too, as well as her doctors, are kind, cordial, generous and hospitable; I don't recall just now any place where a medical convention was received with more courtesy and consideration. It may be though that the public is growing wise and is beginning to heed this maxim: "The doctors are our friends; let's please them well for though they kill but slowly, they are certain." Or, it may be that they look on us as an economic necessity, believing that "a doctor is very necessary to a populous country, for were it not for him men would live so long and grow so thick that one could not live for the other," and try to be agreeable as possible. Whatever may be the motive, we are exceedingly well pleased with the treatment we are getting at the hands of the Alexandrians.

It always does me good to look into the faces of so many of you doctors, some of you handsome looking, some of you medium looking and the rest of you looking the best you can. To say the least of it you look like doctors—that's enough. You know there is something in his appearance that invariably gives a doctor away; the people know him when they see him—and sometimes have to see him even when they know him. I have never yet been able to understand what was the trouble with that good old sister up in Arkansas who called in a doctor (?) to treat her slaughter but found to her surprise that he was a piano tuner. Such a blunder is really unpardonable and certainly uncalled for.

To paraphrase from the small boy's composition on chickens, the varieties of doctors are too numerous to mention. We have the city doctor, the quack doctor, the faith-cure doctor, the osteopathic doctor, the lean doctor, the fat doctor, and lastly, but not

leastly, the country doctor. I am not going to say that all those classes are represented in this audience; if I should say that, it would not be conducive to my personal welfare to tell in which class each one of you belongs. What if I should call a country doctor a city doctor, and a city doctor a country doctor, would you have to stretch your imagination very far to figure out what would happen?

I was born, reared and practiced medicine in the country myself and therefore know more about the country doctor—but, be still over there, I am not going to tell on you. I don't intend to give away your secrets. I can remember now as I recall incidents of my childhood, the mixed feeling of fear and confidence which these worthy sons of Aesculapius inspired in me when I was the recipient of their kind "attentions" fear lest I should have to take what they prescribed and thus end my career prematurely, and confidence in my innate ability to break up the trust owned and operated by them and the undertakers.

The country doctor possesses one quality at least which is worthy of emulation and imitation by others, and that is confidence in himself. With this foundation to build upon, he inspires his numerous friends with confidence in his ability. He gives them pills of confidence, he feeds them confidence, he fills them so full of confidence that they get well—sometimes.

The country doctor has an advantage over the other classes in that his capacity is not limited to one branch. The city doctor very often pursues one line or specializes. The quack doctor or the patent-medicine doctor, they are one and the same, has to depend for his bread and butter solely upon the merits of his one medicine, for instance, "Swift's Speedy Specific"—but that usually cures every thing from a stone bruise to a horse thief. The country doctor, though, has a variety of diseases and ailments to cure. He must know how to pull a tooth as easily (?) as a dentist, to amputate a limb as well as a surgeon, to treat the eyes, ears, nose and throat like the trained specialist. It is only justice to him in regard to all these requirements to add that he knows as much about one as he does about the other.

The great lesson learned during the nineteenth century was the value of combined, organized energy as against the old ideal of

individual effort; so that at this the opening of the twentieth century, combination is the key-note of the times. Not only is this true of industrial affairs, where this principle has been carried so far as to be considered by many a menace to our long cherished Democracy, but it is equally true of all aspects of our life.

Societies and organizations are the order of the day. This fact is evidenced by the growth of organization in the medical profession as well as anywhere else. Eight years ago there were in the United States 120,000 doctors, 30,000 of whom belonged to some local society, while 90,000 had never had any such connection and had not subscribed to any medical journal or followed any post-graduate study. Under the reorganization plans the American Medical Association has in the last five years increased its membership from 8,000 to 56,000, a gain of 600 per cent. The Texas State Medical Association has grown from four hundred to more than three thousand. In 1902 our own State of Louisiana had four medical societies with 419 members in the State organization while to-day we have 47 parish societies and our membership in the State Medical Society represents 936 members, coming from every parish in the State, save two.

This is certainly encouraging to those of us who are convinced of the advantages to come from such organization; yet when we know that fifty per cent of this State, as yet, belong to no local society, we can easily see that much yet remains to be done.

Doubtless the most important as well as the most worthy purpose of medical organization is the education of its members, the increase of their efficiency in the work to which they have chosen to devote their lives. Medicine being one of the most progressive of sciences, one can hope to be proficient in it only by the most constant application and study. Now, stimulation and enthusiasm for such study can come to one only from association with those who are engaged in the same work, those whose interests are like unto his own. If a doctor works by himself all the time he will inevitably become narrow and warped, and will cease to advance; he will think the methods he used yesterday are good enough for to-day and will settle down into a regular rut. In association and discussion with fellow members of his own profession he will be both stimulated and encouraged to keep up; the theory and

practice for which he can offer no good defense will have to be abandoned for better. The medical society is a school, a post-graduate school, if you will, where the education begun at college is continued by the members with the help and encouragement of each other.

Further, the medical society forms the only efficient bureau of information for the collection of statistics in regard to disease, the results of different methods of treatment, etc. Through this means the knowledge and discoveries of a practicing physician in one section of the country becomes the property of the whole profession. No other such means is offered for the advancement of the science.

Again, it is only by efficient organization that the profession can wield political influence sufficient to secure the passage and enforcement of laws for its own and the public's protection against quackery, and the protection of the country against criminal adulteration of food products. The recent National Pure Food Law and the supplementary laws already passed by many of the States offer evidence of what the medical profession can accomplish under efficient organization and wise direction of its great power. As individuals, so widely scattered we could hope to accomplish little in this line; but when organized we become a power worthy of the legislator's consideration.

The same is true in regard to the enforcement of the medical laws in each locality. Unless there is some organization to see to their enforcement, laws, however salutary, become mere empty forms and are not enforced; those elected for this purpose become lax and careless in regard to those laws in whose enforcement they feel there is no important and influential element interested. It is just this important and influential element that the medical society constitutes.

In this strain I might go on indefinitely, multiplying the advantages and possibilities of permanent organization, but I am loath to weary you with further enumeration. Suffice it to say, that through organization I see great efficiency in the individual practitioner, and for the profession as a whole; a wider field of usefulness and in consequence a wider prestige, and a brighter hope for all mankind than I ever dreamed of when I left college, my sheepskin in my hand, doubt in my heart and my fortune to make.

Before I leave this phase of the subject, however, let me suggest briefly two other possibilities in a more efficient organization, namely, the advantages to be derived in a social way and the possibility of improving the business methods of the average doctor.

Organization will undoubtedly bring about a more frequent, friendly and social intercourse among the different physicians of each community. Man is a social animal, and a physician is a man, or, at least, is supposed to be. Above all men on earth the country doctor needs, and especially appreciates, a friendly chat with one of his own badge; for he largely works alone. Many a weary mile, often in wind and rain and in the cold, at almost any hour of the twenty-four, his faithful nag takes his faithful master on his visits of mercy. What a recreation, what refreshment and peace of mind, at stated intervals, to meet with one or more members of the local medical society, and there exchange experiences and swap jokes. Such intercourse tends to renew one's youth, like the eagle, to remove any petty jealousies, to clear up misunderstandings, to make physicians appreciate their dependence upon one another to accomplish the noble end they have in view; and to make each one realize that he is a member of a great brotherhood of great hearted men, and not simply one lone individual who is fighting as best he may without the aid and sympathy of a brother.

Nor is the city doctor less alone in his work and less in need of a social gathering of colleagues, though his hardships are not so great, and he travels over better and shorter roads. He, too, needs and relishes a friendly chat, and the breaking of bread together at frequent intervals with his brother passengers on the voyage of professional life. The benefits to be derived from the social feature alone are well worth the sacrifices necessary for a successful and permanent organization.

Also, such an organization would, I think, be of great value to many physicians in the matter of more uniform fees and an easier and more systematic collection of them. Few doctors employ the best methods in these matters. Certainly an exchange of views on the part of a community of physicians would throw a great deal of light on the business aspect of their work and perhaps add another story to many a doctor's home. The question every practitioner has to face, and, if experience has proven that he can

do it poorly, at best, alone, may it not be that a little discussion of the subject in conference would lighten this one among the many burdens the physician has to carry.

Let me repeat, organization is the keynote of the times and the secret of great success. The hostilities between the forces in the late war between the States had to be suspended, though an anxious world was eager to know the result, until the forces could be drilled and organized; a superior organization on the part of the Japanese had written success on the pages of history before a single battle was fought in the late Russo-Japanese war; organization has utilized the forces of nature and the wealth of the country in such a manner as to make child's play of gigantic undertakings which great Cæsar himself would have denounced as vain and idle dreams of a deranged mind; and organization is destined to accomplish feats in the medical world, and that in no far-off day, which the wisest among us have hardly had the audacity to dream.

With all these benefits to be derived from co-operative effort, we are, *mirabile dictu*, confronted with the deplorable fact that a goodly per cent of our doctors look with disheartening indifference, yea, even with avowed antagonism, on the plan of the State-wide organization. On the tenth of last December I addressed a letter to 2,074 physicians in Louisiana and among other things asked them to suggest something calculated to bring about increased interest in medical affairs and medical societies. Among the numerous replies and suggestions, one doctor, the only practicing physician in a small town of about three hundred inhabitants situated near the middle of the State, replied as follows: "Your long letter was read with much pleasure, but allow me to say that I studied medicine to earn an honest livelihood, and not to run after society meetings and have a jolly time. I know absolutely nothing concerning the medical society of the parish, I have practiced medicine twenty-three years without belonging to any society, and I intend to continue so to the end of my life."

He studied medicine to earn an honest livelihood and not to run after society meetings and have a jolly time! Shades of Hector! If that isn't an example of barbaric ignorance, where, pray, will you find one? This man, a practising physician for twenty-three years—I dare say a veritable travesty on the profes-

sion—was not, or is not, sufficiently acquainted with the affairs of his own parish to know that a medical society is yet to be organized there! I wonder if he knows whether or not there are any other doctors in his immediate vicinity! I feel sure he has never felt the need of them! Verily, verily, “a little learning is a dangerous thing”; our friend has learned a little and thinks he knows it all.

He doesn't want to join a medical society; he doesn't want to come in touch with better and more experienced men; he doesn't want the broadening influence of a wider association; he doesn't want to even keep in long distance communication with them through the medical journals; he doesn't want anything that is broadening, elevating, enlightening, educating, or inspiring; he doesn't want to be progressive and up to date; in short, he wants absolutely nothing except a living—he says himself that's what he studied medicine for, and only that. He is satisfied, and his satisfaction is a curse to society in general. He is getting a living all right but he never dreams of how many he is depriving of one; he is not posted, hence does not know how many lives he has already ended—that's not his business.

As a colossal monument of individualism, heathenism, yes, barbarism, he stands supreme—a man who hasn't sense enough to know, ambition enough to care, nor energy enough to try to better qualify himself for administering to the wants of suffering humanity.

The medical world to-day, impelled by the ceaseless energy of twentieth century brains, is moving in an encouraging manner towards complete organization. Barriers, such as those raised by the man I have just described and his detested ilk, obviously retard the progress, temporarily at least, though they must ultimately be overcome. We have no room, absolutely none, in our ranks for doctors of that stamp, and the sooner they get out, the better.

Medical organization has induced our public officials, both educational and political, to give more attention to the question of public health than ever before. Our State Boards of Health are having required of them much more than formerly, and the public schools are employing lecturers along lines hygienic to teach both teacher and student the best methods of properly caring for the general health.

Many are the children who are deprived of an education from neglect to observe the common laws of hygiene. For the good of the public these things are taught by our profession, often without hope of reward and at the same time knowing it will diminish the annual income of the doctor as disease is prevented.

To impress the laity with the importance of preventing disease is the most difficult matter with which we have to contend. They are willing to expend thousands upon thousands of dollars to stamp out an epidemic, but when it comes to spending money to prevent disease, the majority are bitterly opposed to it. A liberal and intelligent system of public sanitation faithfully executed in every locality, constitutes the basis for the future development of our numerical force, financial strength and individual healthfulness. Upon the faithful collection of vital statistics depends the material prosperity, our health and happiness are to be greatly enhanced and this fair land of ours, with its genial skies, its fertile valleys and rich hills, its bowels of wealth become, not only richer and greater in its magnificent resources, but through its knowledge of the sources of evil that sap life and its power to abate it, all that could be hoped for or desired.

The medical profession belonging to the Louisiana State Society will continue to advocate sanitary laws for the benefit of the general public. The doctor who strives for self alone, ignoring those ends that lead to ennoblement of the profession and who is out of sympathy with that which conduces to the public good is at length measured by his own rule, and in sharp contrast with the unselfish worker must take a back seat.

Thus you see none of us appreciate the possibilities of medical organization unless we consider how great our duty is to those who have not been enlightened and those who shall come after we are gone.

Personally I have always felt a vital interest in the organization scheme of the medical profession. Seeing therein the fullest development of the science and the greatest dissemination of knowledge, I ardently supported any measure looking to that end. For eleven years my lot has been cast among you, during which time my spirit has been wholly in this work though my hands may have been idle. I am egotistical enough to think that I have been of some slight help to the medical interest of our State

—every one is who makes the effort—but in that I am wont to say, with Sir Richard Granville, that, “like an honest man and true, I have only done my duty as a man is bound to do.” Knowledge of duty done begets large reward. You, though, “filled to the verge my cup with wine of this life” when one year ago in convention assembled you named me to succeed that prince of doctors, Henry Dickson Bruns, in the capacity of President of the State society.

That, ladies and gentlemen, I count the most honored day of my professional career, the day on which I was raised to the highest office, in your, in our society. While being the source of boundless gratification it has, at the same time, by necessitating a closer study of present conditions, the more deeply impressed upon me the magnitude of this great work, and made me feel the more keenly my inability to direct the forces in its accomplishment.

My term is almost ended. With a deep sense of gratitude for the confidence reposed in me during the days that are gone, and looking into the future with undimmed eye, I shall, with the feeling that a better fitted man comes into power, relinquish the reins of office to him, whomsoever you may choose to succeed me. The duty of the private is no less than that of the captain; and just as you in private ranks have stood by me, your captain, throughout the past year, even so shall I, once more in the rank and file, bend my energies to the furtherance of your interest. The remembrance of this trust will be a fountain of joy throughout the coming years and when I shall come to drink on the Lethe’s bank, may it be the one memory that will baffle the “forgetful water’s charm.”

I indulge the fond hope that we, in the first stages of fraternal organization, may soon be joined by every other doctor in the State and thus be merged into one great family, wherein a brotherly love exists and by whom our common principles and rights are conserved. That may be the millenium, but I wish that it were close at hand.

All through the preparation of this speech I had constantly in mind the purpose of making a delightful (?) ending. My friends have always been flattering enough to say that the finish

of my talks is usually good; that they especially enjoy my closing remarks; nobody knows the reason.

Really, I was counting on the inspiration of the moment to furnish me the ideas and also the language wherewith to couch them. I was going to give them to you in verse of lyric sweetness but, lo! the inspiration missed connection and failed to arrive.

I took the tablet which I had and called on the name of my muse from morning even until noon, saying, "O Euterpe, hear me." But there was no voice, nor any that answered. And it came to pass at noon that a secret spirit came unto me and said: "Cry aloud, for she is a muse; either she is talking, or she is pursuing, or she is on a journey, or peradventure she sleepeth and must be waked." And I cried aloud, but there was neither voice, nor any to answer, nor any that regarded. My muse balked. She refused to budge. I was left where one generally is when his dependence refuses to work. I was in a hole and couldn't get out. Right here, though, is where I called in assistance, and with a two-fold invocation we conjured up a departed *shade* who opined that—

'Tis only fair
To declare

That—

While others die, the doctors live;
No pills to take, but pills to give.

He pokes his nose, likewise his bill,
Where'er he finds a man is ill.

He never growls, he always smiles;
He comes with haste o'er weary miles—

He makes his calls, in rain or cold;
Chalks up those trips, and thinks of gold.

He counts it won, no failure weens;
"The coin's as good as in my 'jeans.'"

But listen here, and take the tip:
'Tis no sure thing 'twixt cup and lip;

Don't count it good: No coin he gleans
Who thinks it's safe outside his "jeans."

You'll get it, sure! in this respect:
Not in the "jeans," but in the neck.

So much for the possibilities of medical organization.

"We stand to-day upon the mountain heights of time; behind us is the midnight of the centuries; before us is the dawn of the eternal morning; within us is the still small voice of conscience and of prophecy, pleading for our fidelity to honor and to duty, in the great work yet undone, pleading for our devotion to the highest good of the myriads yet unborn, pleading in the name of Truth, and in the name of Hope, and in the name of God."

Orleans Parish Medical Society Proceedings.

President, DR. AMÉDÉE GRANGER.

Secretary, DR. E. M. HUMMEL.

141 Elk Place, New Orleans.

In Charge of the Publication Committee, DR. E. M. HUMMEL, Chairman.
DR. HOMER DUPUY and DR. S. K. SIMON.

MEETING OF MARCH 14, 1908.

DR. JOHN F. OECHSNER exhibited

A CASE OF FRACTURE OF THE PATELLA.

The points of interest in the case were: The disarranged condition of the fragments found upon opening the joint. The capsule and soft tissues were found interposed between the fragments and other joint structures; had interposed others close beneath the articular surface of the patella; the joint cavity was found filled with blood clot. Operation consisted in opening the knee joint by transverse incision, clearing out the clots and reapposing the patella fragments properly, after everting the mem-

brane of the capsule. The joint was closed by suturing the capsule with interrupted catgut sutures. The skin wound was closed with interrupted silk worm gut. Gentle passive movements were begun early on the twelfth day and continued persistently throughout the treatment. The good results were largely attributable to this precaution against adhesions and ankylosis. The joint functions, as demonstrated at the time, were practically unimpaired. No drainage was used. Six weeks had intervened since operation.

DR. JOHN F. OECHSNER presented

TWO CASES OF PUS IN KNEE-JOINT.

I beg to present to you tonight two cases showing the effect of early incision and drainage in cases of pus in the knee-joint. The histories of these cases are as follows:

CASE No. 1.—Alice Y., two and one-third years old. Admitted to the Charity Hospital September 5, 1905; discharged October 11, 1905.

Diagnosis: Pyarthrosis, right knee joint. Family and personal history good. Present illness began three weeks before admission to the hospital. No definite history of traumatism. She began to limp and there was a slight swelling around knee-joint. While walking, the leg was slightly flexed. Any attempt at passive motion would cause pain. Counter irritation was made for about one week at home, and in consequence the knee was well blistered. Temperature was noticed about ten days after child began walking lame. She was kept in bed, and further counter-irritation practised. Upon admission to the hospital, the right knee was found greatly swollen; painful on pressure. The leg could not be flexed. No fluctuation. The joint was immobilized with sand bags and an ice cap applied. The day following admission, aspiration showed pus in the joint. A free incision on the internal and another on the internal aspect of joint was made, pus evacuated and a rubber drain inserted. Pus was found to contain staphylococci. On the third day our attention was attracted to the presence of pus on the napkin and a vulvo-vaginal inspection was made; the parts were very much congested. This pus showed staphylococci, but no gonococci. Subsequent examination gave the same result. In view of a negative history of traumatism to the knee, we felt that pos-

sibly a specific vaginitis might have occasioned the pyarthrosis. The joint was flushed with normal salt solution, and at the end of two weeks, the little patient was taken home with a gauze drain substituted for the rubber. At home she became worse and was readmitted for another two weeks, at which time the gauze drain was removed and the wound readily closed. Passive motion to the joint was practiced daily, and in about one week she was enabled to walk with a nurse's assistance. The leg was now easily flexed, and there was no rigidity. The present condition is one of perfect movement of the knee joint, as you can see.

CASE No. 2.—Lucille T., fourteen months old, was first seen February 3, 1906, and discharged March 9, 1906.

Family history: Father died of acute miliary tuberculosis—had used alcohol extensively. Mother living and in good health. Personal history: Very healthy up to present trouble. Present illness began ten days previous to time of first observation, child falling on knee, but aside from pain at the time of accident, there were no other symptoms; on the morning following injury she was able to walk without pain. Three days later there was some pain, and the little patient would cry when any effort was made to move the joint. At first examination the joint bore the appearance of a simple effusion, and was immobilized. Four days later there was distinct fluctuation with some edema below joint. Joint was red and temperature was 103°. February 8, joint was opened by internal and external lateral incision. Pus evacuated. Boric acid irrigation; rubber drainage.

February 9—1 to 20,000 bi-chloride irrigation.

February 22—Tube discontinued; gauze drain substituted.

March 2—All dressings removed; wound closed; no ankylosis. Bacteriologic examination of pus, February 10, after a culture of forty-eight hours, found to be sterile.

February 19—Pus sterile.

Present Condition.—Joint movements perfectly free and absolutely no lameness.

The points I desire to emphasize are that we should always make a free outlet for pus wherever found, and as soon as we detect it. Joints have heretofore suffered for fear of invading them. Tubercular abscesses (cold abscesses) are the exception, on account of the danger of subsequent mixed infection. Again, drainage

should be continued only as long as necessary. We have heretofore erred on the side of drainage long continued.

DISCUSSION.

DR. E. D. MARTIN: This subject is interesting because we often see joints ankylosed from prolonged infection, with consequent erosion of the structures. Joint infection is not infrequently the sequence of septic constitutional states and cachexia. In a recent article G. Riebold recommends injections of 2% solution of collargol. He first injects 8 c. c. of the solution, and one or two days later an additional 6 c. c. The latter injection is repeated as often as indicated. I have not had occasion to test his method, however.

About six weeks ago we had a case in ward 36, a colored girl aged 16 years when ten days previous to admission had developed a painful swollen condition at the elbow joint. She had some fever, and owing to the inflamed condition of the genitals, there was some suggestion of the joint condition being a gonorrheal arthritis. Under anesthesia a half ounce of pus, containing diplococci, was withdrawn, and one-half ounce of iodine was injected. Rest and application of the Bier bandage was practised for several days. The patient deserted on the eighth day after operation, with practically a normal joint. The object in using iodine was to combat infection, and it is considered harmless to the tissues, as it causes no inflammatory reaction and is readily absorbed.

Dr. Oechsner has brought out several interesting points. He has demonstrated that there is no additional danger incurred by opening a severely injured joint, if careful asepsis is practised, and he very properly emphasized the necessity for early passive movements, if we would avoid ankylosis and obtain good joint function afterwards. We have been accustomed to practise immobilization too long in treating injured joints and fractures. Strict immobilization is necessary only long enough to secure moderately firm adhesions. Gentle passive movements should be begun and kept up at sufficiently frequent intervals to preclude the formation of vicious adhesions which would later hamper, if not prevent joint movements. When a drain is used it should be removed as early as possible, as too long use of it has the same influence as pus in keeping up irritation and inflammation.

DR. J. J. ARCHINARD: I would like to say that the tubercle bacillus is very difficult to find in knee and hip joint troubles. If a portion of fluid is withdrawn and allowed to stand for twenty-four hours, and if cultures are made in the sediment, we may find the germ. I examined yesterday twenty-five slides in search of the tubercle bacillus in a case of suspected tubercular arthritis of the hip. Centrifugal methods failed to yield results. I may find it later by culture methods.

DR. LAZARD: Six or seven years ago I reported before this Society a case of knee-joint suppuration, gonorrheal in origin, in which I opened and drained the joint. The results were perfect and the joint function was in no wise impaired. The man has subsequently died from other causes.

DR. OECHSNER (in closing): My only object in presenting these cases was to show the excellent results obtained. When we discover pus in a joint the idea is not to wait, any more than we would hesitate upon finding pus elsewhere. The more the delay, the greater the danger of erosion and destruction of the articular surface. I did not wish to discuss joint troubles in general, but endeavored to confine attention to the cases I have exhibited.

DISCUSSION OF DR. ELLIOTT'S PAPER. (MAY JOURNAL.)

DR. J. J. ARCHINARD: I wish to say something regarding the blood count in this case. Dr. Elliott seems to think that 8,000 leucocytes is the minimum count. In 75% of criminals examined by me there was a count of 7,800, and that in apparently normal individuals; the presence of lymphocytes ranging from 75% to 90% and eosinophiles from 1% to 2% may be changed after a healthy meal. It was these points in the blood count that I wished to contest.

DR. BASS: I want to suggest, as an explanation of the sterility of the pleural fluid in the case in question, that we have to accept that there was an original septic focus, and that there was a septic process in the lung resulting. Otherwise there could have been no corroding of tissue and consequent fistulous formation into the pleural cavity; therefore, there must have been bacteria in the fluid in the cavity of the pleura at some stage of the condition. The failure to find them might be attributed to the fact that the polymorphonuclear leucocytes had had time to phagocyte and de-

stroy them. In the presence of necrosed tissue such as an infarct, the leucocytes are unable to remove infection; but in normal tissue such as the pleural cavity the phagocytes might clear up the pathogenic bacteria, so that examination fails to reveal them.

In regard to the blood count, I wish to suggest that it is a fact that in the beginning of a septic process the number of leucocytes is greatly increased, but after reaching the maximum, and regardless of the continued pronounced toxemia, the count tends to decrease, especially if the case progresses to death. In other words, the leucocyte-making apparatus becomes exhausted. Such a state of things is found in uncinariasis. At first the eosinophiles are found increased, 30% or 40% sometimes being found. As the infection increases, however, the eosinophiles drop off, giving a low count, though the abnormal process continues augmented. In my opinion this is the best explanation of the low leucocytic count found in Dr. Elliott's case.

DR. J. J. ARCHINARD: I desire to say that the statements regarding the eosinophile count made by Dr. Bass are misleading. I know of a case diagnosed as hookworm on this kind of blood count which never had hookworm at all. He had 4% eosinophiles but, as subsequent developments proved, no hookworm. I will say that a blood count giving 40% eosinophiles is very rare. I must say that I have seldom made this count myself; at any rate, I do not believe it is diagnostic of hookworm.

DR. C. JEFF. MILLER gave a demonstration of

INJURIES TO THE PELVIC FLOOR DURING LABOR,

using a freshly dissected specimen and a number of specially prepared illustrations to portray the anatomical relations of the points dealt with and the mechanism of their laceration during delivery.

DR. CHAVIGNY: I have listened to Dr. Miller's very interesting talk, and although the doctor did not, in his demonstrations, deal with the general questions of perineorrhaphy, there is one point in regard to the preparation of cases for repairing the perineum to which I would like to call attention. We are accustomed to consider perineorrhaphy a slight operation and do not make as thorough preparations as we should. As we all know, edometritis and other conditions of the uterus are found necessitating curet-

tage or trachelorrhaphy, as well as perineorrhaphy, and it is the custom to do both at the same sitting. In my opinion, this is an error, as the secretions from the uterus drain over the site of the perineal wound and quite often produce infection and sloughing. At first I blamed the sloughing on the catgut sutures, but experience has taught me how to avoid these untoward results and I now curette the uterus, when curetment is required, five or six, at least three or four days before operating on the perineum, with no more sloughing. I would further like to lay stress on the necessity for thorough general preparation of the patient—she should be kept on liquid diet for several days previous to operation, but just before should be given some purgative and an enema.

DR. E. J. GRANER exhibited a

SEED OF THE COCA DI MIR,

the largest seed of the vegetable kingdom, and interesting because of its resemblance to the female pelvis. Coca di Mir is a rare tree found at Praslin, a small island twenty miles north of Mahe (Africa). As surmised by General Gordon this was the site of the Garden of Eden. General Gordon thought the Coca di Mir might be the Tree of knowledge, and probably drew his inference from the resemblance of the seed to the female pelvis. In size and shape the seed resembles in every particular the female pelvis, having parts corresponding to the mons veneris, vulva (with hirsute fibres projecting, and upper thighs.

N. O. Medical and Surgical Journal

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

Meeting of the State Medical Society.

The first meeting of the State Medical Society to be held outside of New Orleans in several years took place in Alexandria on May 12, 13 and 14. As was to have been expected, owing to the financial stringency and the fear of insufficient accommodation, the new hotel not being ready, the attendance was small compared to that of the last few years, the total number registered being one hundred and sixty-nine. Forty of these were from New Orleans, an inadequate representation, there is no doubt, as the membership of the Orleans Parish Medical Society constitutes more than a quarter of that of the State Society. This inadequacy was the more noticeable for the reason that a number of those who did come arranged it so as to appear only to read their papers, and either came late in the meeting, or left as soon as their papers had been disposed of. We consider this practice reprehensible and as tending to diminish the interest in the meetings; we prefer frankly to call attention to this point in the hope that there will be fewer offenders of this kind in the future. At any rate, all the members who did take the trouble, whether from the country or the city, to come for the whole meeting were amply repaid and it can be considered that, all in all, the meeting was quite a success.

The program included nearly sixty papers, of which forty-three were actually read before the meeting, the remainder being read by title because the writers either did not attend the meeting or were not present at the proper moment. The papers read, in the majority of instances, were above the average and most of them led to interesting and instructive discussions.

On the first day, from 5 to 7 in the afternoon, the ladies of Alexandria gave a reception at the Elks' Club in honor of the

members of the State Medical Society, which was largely attended and declared a great success. The ladies seemed to vie with each other to be courteous and attentive to their guests; there was some delightful music and the refreshments were much enjoyed. There appeared to be a larger proportion of pretty women than we have almost ever seen.

The feature of the second day was a trip to the Louisiana Hospital for the Insane at Pineville, across the river from Alexandria. The members went by special train upon the invitation of Dr. George A. B. Hays, the Superintendent; they were shown over the institution, witnessed a semi-military drill by a number of the patients and enjoyed a bountiful and excellent buffet luncheon tendered by the Doctor and the management of the Hospital. In the evening, the usual public session was held, at which the Hon. Robert A. Hunter made a most able address and received the usual vote of thanks, besides being made honorary member of the Society. The President, Dr. Oscar Dowling, read an address on Medical Organization which was witty, without losing sight of the practical features of his subject, and received deserved applause.

On the last day, in addition to the reading of scientific papers, the usual business matters came up, including consideration of the practice of medicine bill and other matters to be brought to the attention of the legislature, all of which were referred to special committees. At night the banquet tendered by the Rapides Parish Medical Society was given at the Rapides Hotel. The menu was bountiful, the dishes were excellent, the service good and the wine more than plentiful. The post-prandial addresses were, we must confess, not above the average, and we trust that no one will be offended by this statement, as the writer of this summary was one of the perpetrators.

The Orleans delegation went and returned on a private sleeper, and things moved at a lively pace, especially on the trip to Alexandria. Just before the train left for the trip home there were further lively doings for which, however, the Rapides delegation was chiefly responsible through their anxiety in showering attentions upon their visitors up to the last minute. The Orleans members were participants only partly through their own will. We have heard rumors of exciting ambulance rides in the stillly night, but we are not going to tell tales out of school.

The Quack and the Daily Press.

The JOURNAL took occasion to pass favorable mention of the New Orleans *Morning World* upon the announcement that this new paper in local journalism would publish no advertisements of quacks or of patent medicines. A proper contrast was drawn unfavorable to some of the other newspapers of New Orleans and the JOURNAL called attention to glaring offenses against public decency in some advertisements appearing in other lay papers. The *Picayune* took umbrage at our general commentary and editorially noticed our essay at the field of mercenary obliquity as shown by flagrant advertisements of patent medicines, quacks, and abortionists.

The *Morning World* has been more than consistent in fulfilling its promise so far as such advertising is concerned. This paper has consistently gone at the evils in New Orleans, with the result that several prominent advertising "doctors" are now under indictment by the grand jury. The Orleans Parish Medical Society, the Louisiana State Medical Society, the Charity Hospital of Louisiana Alumni Association, and several other associations in the parishes throughout the State have passed resolutions encouraging and praising the *Morning World* for its crusade against quackery.

Meantime the rest of the daily press has remained silent on this public question, which in some states has been a great issue.

It is to be hoped that a strong public sentiment will follow the agitation of this question and compel a response from the press generally, which must be hidebound not to see that their only excuse for continuing such advertising is mercenary and that most decent people know this.

This whole question is not simply a reflex of a "moral wave"; it is the result of education. The daily newspaper has a public obligation and this must come before any obligation to the advertiser or his wares. If these wares are within the purview of criminality, even if the law has not reached them, the newspaper should be the first to respond to the obligation which the knowledge of such entails.

The JOURNAL has been periodic in its comments on quack advertising and there is nothing new to add. It remains to be seen just how long the public panderers of depraved medicine and its practitioners will be permitted to flaunt before the people without interference by a righteous law.

The Chaille Jubilee.

The many friends of Professor Chaillé whom the *Journal* may reach will be gratified to know that the occasion of the celebration of his fiftieth anniversary in the Medical Department of the University of Louisiana, now Tulane, was a great success. A distinguished and enthusiastic audience gathered at the Tulane Theater on the night of May 19 and for fully three hours listened to the encomiums which were delivered by men distinguished at home and abroad, all his friends.

The program of the evening was arranged to cover the history of the man honored from every point of view, and those who participated seemed to have caught the spirit thoroughly.

The addresses were introduced each in turn by Dr. Isadore Dyer, the master of ceremony and Associate Dean of the Medical Faculty. The first speaker was Dr. I. I. Lemann, President of the Alumni Association of the Tulane University of Louisiana, which body had inaugurated the idea of the jubilee and also that of the Chaille fund.

Dr. Lemann said that the Alumni Association realized that no man had deserved its esteem and devotion more than Professor Chaillé; that after his fifty years of service it was appropriate that the alumni generally, and particularly of the Medical Department, should encourage an occasion like the present. That he voiced this large army of men who had gone out into the world, many of them carrying the heritage of encouragement, advice and example from the Dean and teacher of the Medical Department now terminating his fifty years of service. Dr. Lemann called attention to the fact that the fund which had been started with the object of establishing a chair to be named after Dr. Chaillé was already assuming some proportion; that the alumni hoped that the medical profession throughout the South, and especially the alumni of Tulane, would respond to the high purpose which it indicated. It was believed that the many friends of education, as well as those attached to the distinguished dean himself, would help to make this fund one truly memorable.

In conclusion, Dr. Lemann said that he presented the jubilee to Dr. Chaillé in the name of his former students and of the Alumni Association.

Dr. E. B. Craighead, the President of the University, said, in acknowledging the services which had been rendered to the University by the master teacher, that, although he had been associated with him only four years, he felt he had the right to express the feeling of the University for a man like Dr. Chaillé. The speaker referred to the retirement of Professor Souchon last year and of Professor Elliott this year, both of whom had rendered valuable and remarkable service to the Medical Department; he stated that while they retired actively from the faculty, the University did not expect to lose their services, for it expected to call upon them in their emeritus capacity until a higher power called them away. He addressed Dr. Chaillé directly with the remark: "If any man has a right to call himself fortunate, you have that right, sir; we have a great medical school here and all know that this is largely your work." The speaker continued, saying that his personal relations with Dr. Chaillé had always been exceptionally cordial; that he had always found him to be "absolutely square." The service to the University was not to be measured in terms of money. In conclusion he joined with the faculty of the Medical Department and with his friends in wishing that his life might be long and happy.

The Rev. Beverly Warner followed in a tribute in behalf of the administration of the University: "Our fair city of New Orleans has ever been rich in the genius and achievement of her medical faculty; there has never been a gap in the succession of torch bearers. In the van of those who have thus spread the light stands Stanford Emerson Chaillé, Doctor of Medicine, Doctor of Laws, Doctor—the degree is unknown—the power is acknowledged—Doctor of Men."

The speaker cursorily passed over the traditions of medical teaching, referred to the qualities which determine a great physician, touched upon the distinct offices which had been held and honored by Professor Chaillé and followed with these words: "It is not for the honored Professor and respected Dean, however, that I bear a message from his associates—many of them life-long—of the Board of Administrators. It is not of the editor and author I speak, nor of the soldier bearing arms, the surgeon healing wounds; it is not even of that long and brilliant professional career, starred by civic, State and national honors, but it is of

Stanford Emerson Chaillé, the man, who will loom largest after all in the matured judgment of his fellows. No calling, not excepting that of the minister of religion, knows so surely the intimate connections of good morals with good citizenship and good service to the State as the physician; no man has clearer or more exact knowledge of the close associations of ethical standards with the sound mind in the sound body than he who claims apostolic succession from St. Luke. Dr. Chaillé's fifty years of leadership have been inspired by this idealism and has left so deep and uneffaceable an influence upon his students that they will have missed the vital quality of his teaching if they have not learned it. * * * The influence of his teaching on the minds of two generations will but deepen and widen with the enduring years. The honors that have crowned his long day's work will flash and glow upon the rosary of life, amidst the duller beads of routine followed, and homely duty done; and yet, transcending all these, the fine floescence of them all, will Chaillé, the man, remain a moral influence on the medical profession, as indelible, as pure."

As the representative of Governor Sanders, who had been unavoidably detained on account of his pressing duties at the Capital, Mr. St. Clair Adams delivered an eloquent tribute expressing the congratulations of the Governor and the State to Professor Chaillé on the achievement of his fifty years of service.

Following Mr. Adams, Associate Justice Frank A. Monroe gave a biographical sketch of Dr. Chaillé's life, especially touching upon his service as a Confederate soldier and reviewing his wonderful insight in the legal relations of state medicine as evidenced by his many contributions to this cause. He detailed in particularity his contributions which have become historical in national sanitation and those which have grown into the Constitution of the State of Louisiana.

After an address of considerable length, Justice Monroe concluded with this high acknowledgment: "For any man knowing him, not to emulate him is to confess a lack of appreciation of the true attributes of citizenship and manhood."

Dr. Lewis S. McMurtry, ex-President of the American Medical Association and a graduate of the University of Louisiana in the class of 1873, introduced his discussion of Professor Chaillé as an organizer, with a review of the qualities which had contributed to

the art and science of medicine, finally crystallizing the argument of his paper around the successes in medicine of the last half of the Nineteenth century. Of this he made Dr. Chaillé a part and delivered himself of many high encomiums on Dr. Chaillé as a teacher. He dwelt on his enthusiasm, his earnestness, his power of analysis and his ability to present complex subjects simply. He said, "I have heard many teachers in medicine; I have visited many colleges, in both this country and in Europe, besides having been a teacher myself for twenty years, and I have never known anyone so impressive or one to impart to the student so much knowledge as a permanent possession as does the honored master of this occasion. * * * The world judges by results, and the present high standing and assured progress of this Department of Medicine is the result of the labors of yourself and your colleagues during the years of your devoted service. * * * You have indeed erected a monument more durable than bronze. I congratulate you upon all that has gone before and also upon the present; it is all beautiful; it is as it should be: 'Honor to whom honor is due'."

Dr. George M. Sternberg, ex-Surgeon-General of the United States Army, presented a grateful review of Professor Chaille's contributions to sanitation and made an historic record of Dr. Chaillé's work on the Yellow Fever Commission of 1879 in Havana, in the report of which he stated that there had been anticipated the present theories regarding this disease; that clear reasoning had indicated a deduction which had been borne out by further experimentation, bringing it now to exact knowledge. Dr. Sternberg dwelt upon the privilege which he enjoyed in the personal friendship of Dr. Chaillé, which had given him this opportunity of conveying publicly his high estimate of his comprehensive work in sanitary measures. He concluded with the statement that the record of Professor Chaillé's researches constituted a landmark in the history of scientific medicine of which all might be proud.

Dr. Paul T. Talbot, of the graduating class of 1908, delivered a most creditable address in which a character sketch was drawn of the Dean and teacher from the student's point of view. He analysed the man in his office, with his peculiarities. He brought out the methods which made the teacher and concluded with an expression of appreciation which detailed the manner in which the

confidence and admiration of students had always been obtained in spite of discipline. The side lights of his sympathetic disposition, his ready advice, condolence, or the way in which he would share the burdens of a student's heavy heart, met a full review. "These tributes to him," said the speaker, "come spontaneously out of full hearts, accompanied with wishes for many days of future prosperity and happiness. * * * Perchance some day, in the dim and distant future, the mist of time will build about the name of this great educator, a halo that will carry him on to future generations, just as the name of some of his compatriots, long gone, are brought down to us."

Most appropriately, the next speaker, Professor Ernest S. Lewis, was introduced by the master of ceremony as the one most fitted to conclude the program, for his more than thirty years of service as the colleague, friend and associate of Professor Chaillé had entitled him to present his picture of him, and that in his own devotion he could convey what was most in the hearts of his students and his friends.

Professor Lewis said: "In assuming the role of speaker on this occasion, in honor of a distinguished and eminent colleague and scientist, about to retire after half a century of notable and praiseworthy work, in the Medical Department of Tulane University, **and in the fields of hygiene and sanitation**, I am deeply sensible of the difficulty and delicacy of my task, and not without misgivings as to my fitness to do the subject justice, regarding the selection of the Alumni of the Medical Department as a courtesy to a senior in years and service, whose acquaintance with Dr. Chaillé antedates the civil war.

"Recognition of the value or greatness of services rendered in any line of work, as a rule, does not evoke the sentiment which calls for its acknowledgment during life. It usually awaits the visit of the grim reaper and often times is ignored or tardily given. In the present instance circumstances prove most propitious, and furnish the opportunity for a testimonial on the part of the Alumni of their high appreciation, esteem and affection for a distinguished teacher and scientist, about to withdraw from the field of his activities.

"When we write or speak of a man who by force of character, talents, civic virtues, or achievements in some field of human en-

deavor, has reached the summit and won golden opinions from his fellow man, curiosity, a very human trait, craves for a more intimate knowledge of his past as well as of the present.

"From the biographical sketches of Dr. Chaillé, which have at various times appeared, we learn that he is descended from a Huguenot branch of an old and respected family of Poitiers which had furnished this town with Mayors and other officials for years. The progenitor of the American Chaillés, when a young man and married after the massacre of his family, and the revocation of the edict of Nantes, escaped to England, where he settled and became naturalized. He was one of many to prefer expatriation rather than sacrifice principle or submit to religious persecution; for as the historian Guizot relates, the revocation of the edict of Nantes struck a blow to France, far more destructive than all her foreign wars, and coalition of European states against her, as over a hundred thousand of her best blood, its bone and sinew, removed to more hospitable shores, carrying with them what wealth they could, their industrial arts, and cherishing in their hearts a bitter resentment. From England he emigrated to America and settled in Boston, about the year 1700. A son, Moses Chaillé, subsequently removed to the eastern shore of Maryland and there married and became prosperous. His only son, Peter, became a distinguished officer in the Revolutionary War, with the rank of Colonel, and held many important positions during life. He was married to Miss Houston, a lady of Scotch descent, by whom he had several children. A younger son, William Chaillé, was the grandfather of the subject of this sketch, and was survived by but one son, William Hamilton, who married Miss Stanford, of Maryland, and then emigrated to Natchez in 1799, where he died in 1836 prosperous, loved and honored. He left but one son, Dr. Stanford Emerson Chaillé, whose early instruction was from private tutors; then at Phillip's Academy, South Andover, Mass., where he was graduated in 1847, and from there to Harvard, receiving his B. A. degree in 1851, and in 1854 the degree of A. M. He was also honored in 1905 with the degree of Doctor of Philosophy, conferred upon him by the Tulane University.

"In 1851 he began the study of medicine in the University of Louisiana, receiving his degree of Doctor in Medicine in 1853,

after having served in the Charity Hospital eighteen months as resident student. He then became for one year resident physician of the United States Marine Hospital, and from 1854 to 1860 held the same position in the Circus Street Infirmary. He was also co-editor of the *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL* from 1857 to 1868.

"In 1857 Dr. Chaillé married Miss Laura E. Mountfort a member of a prominent family and a daughter of Lieutenant Colonel John Mountfort, descended from the Mountfort who was one of the "famous Boston tea party." This union was blessed with one daughter, Mrs. David Jamison, who inherits much of her father's intellect and who has two sons to cheer him in his declining years.

"He became officially connected with the Medical Department of the University of Louisiana in 1858 as Demonstrator of Anatomy, until the outbreak of the Civil War, when he became a private of the New Orleans Light Horse from 1861-1862; Acting Surgeon General of Louisiana from February 17 to May 1, 1862; Medical Inspector on the Staff of General Bragg from May 12, 1862, to July 24, 1863; then surgeon in charge of a hospital in Atlanta, and afterwards of one in Macon, Ga., at which place he was captured in May, 1865. After being paroled he returned to New Orleans. During the momentous and trying years of reconstruction, the Medical Department feebly struggled, and great credit and honor is due the faculty for their unselfish and comparatively unremunerative labor in the cause of medical education.

"During the session of 1865 and 1866, Dr. Chaillé in addition to his duties as Demonstrator of Anatomy, which he had resumed upon the reopening of the Medical College, lectured on Obstetrics, in place of Professor Cenas, who was taken seriously ill during the course. In 1868 a vacancy occurred in the chair of Physiology and Pathological Anatomy, by the death of his distinguished and eminent predecessor, Dr. Thomas Hunt, for many years Dean of the Medical Faculty, and he was unanimously elected to succeed him. Hygiene was added to this chair in 1890. Dr. Chaillé is the second alumnus of the University of Louisiana, now Tulane, to obtain a professorship in its Medical Department, Dr. Carpenter having been the first. Today the alumni of the University compose fully three-fourths of its faculty. In 1885 he was ap-

pointed Dean, to succeed that distinguished and eminent surgeon and Christian gentleman, Professor T. G. Richardson, and has so continued to the present time. Notwithstanding his onerous duties in the Medical Department he has delivered popular lectures on physiology and hygiene to school teachers and the public from 1884 to 1888 and to the students of the collegiate department from 1885 to 1888 as professor of those branches in that department.

"As Professor of Physiology and Pathological Anatomy he was thoroughly equipped when elected to this chair. He had devoted years of study in preparation both here and in Europe, working in the laboratory of Claude Bernard, then in zenith of his fame and the foremost physiologist of his day. As lecturer and teacher he is not surpassed by any of his colleagues. He is eloquent, logical, with a clear, concise and forcible manner which fixes attention, and strikes home, engrafting his subject upon the minds of his hearers so it takes root. A rare gift which few possess and which stamps the ideal lecturer and teacher.

"The only man I knew who equaled him in this respect was Prof. Hawthorn, my predecessor in the Chair of Obstetrics and Gynecology. So conscientious and honest is Dr. Chaillé in the performance of duty that often when physically ill, he has worked on upheld by his indomitable will, vigorous intellect and great nervous energy.

"Dr. Chaillé has held many important positions. He was a member of the International Medical Congress, which met in Philadelphia in 1876, and was chosen to deliver one of ten addresses; his on "Medical Jurisprudence," for which he was highly complimented by the President and his fellow members. He was appointed by the United States Congress one of the twelve experts to investigate the great yellow fever epidemic of 1878, and was chosen secretary of the Board 1878-9; appointed by the National Board of Health, one of the four members of the Havana Yellow Fever Commission, and as its President (1879) served with ex-Surgeon General Dr. G. M. Sternberg, a most distinguished citizen and scientist and one of the speakers on this occasion; appointed by the National Board of Health its "executive agent" at New Orleans, with the title of Supervising Inspector of the National Board of Health,' March, 1881, to October, 1882; com-

missioned by President Arthur one of the seven civilian members of the National Board of Health in January, 1885, and so continued until the Board was abolished in 1893.

"He has in addition been a prolific contributor to medical literature. Of eight articles on vital statistics one in connection with voters in Louisiana, 1874-76, was published by the United States Congress. He has also written on the origin and progress of medical jurisprudence; human anatomy and evolution; medical colleges; profession and public; State medicine and medical organization; State medicine and State medical societies; sanitation and evolution; abuse of alcoholics; reports of yellow fever commissions, and many other important medical contributions which have been published in the various periodicals of the country.

"It was chiefly to his efforts when chairman of Committee on State Medicine of the Louisiana State Medical Association that is due the clause on State medicine engrafted in the Louisiana Constitution of 1879 and also several laws subsequently enacted by the State.

"To him also more than to anyone else, through his strong personality, forcible pen, tact and ability are we indebted for the present status of our medical organization which as a State association with its affiliating branches in every parish and comprising within its folds nearly all the reputable physicians in the State, is second to none in the South in influence and power and in its potentiality for good in matters of public health, and in upholding and maintaining the dignity of the medical profession.

"In recognition of these facts, of what he has done in the cause of medical education, and as a testimonial of the esteem and affection in which he is held, the members of the Orleans Parish Medical Association paid him the compliment of presenting his portrait to the association with fitting ceremonies, where it hangs in its meeting hall, an ever present incentive, and example to its junior members which to them bespeak the man who acted out the whole—

"'The whole of all he knew of high and true.'

"As a writer he wields a ready pen, with vigor, breadth of thought, and mastery of his subjects in a style at once logical, clear, concise, and scholarly.

"As dean of the Medical Faculty he possesses administrative and executive abilities of a high order, justifying the title of an ideal dean as applied to him by members of the faculty. Thoroughly conversant with the history and records of the Medical Department he is never at a loss to furnish information of past happenings in faculty meetings. He is familiar with the history, organization and standard of all important medical colleges in the country. He presides at faculty meetings with dignity and enjoys the esteem and confidence of his colleagues.

"He is noted for punctuality and never failed to comment when it was lacking in his associates. With him, it assumes the proportions of a virtue; in fact a religion. The business and financial management were under his sole direction and control; the faculty reposing implicit confidence in his business abilities and high integrity. His sound judgment, thorough knowledge of college matters, grasp and clear exposition of subjects under discussion, generally won his associates to his views. In touch with the student body knowing and understanding them thoroughly, no one is more respected, venerated and loved. He has done much to elevate the grade of medical education, and to promote the interests of the department, taking the initiative in all measures tending towards these ends. Cautious by nature, and with greater responsibility as dean, or perhaps more farseeing than others, though as much in touch as his younger colleagues with the spirit of progress in medical teaching, he never favored radical changes, but rather a policy commensurate with the educational conditions of the South, and the aggressive competition of rival medical colleges.

"As a man he represents a type in which he stands alone. He is *sui generis*. Strength of character and will are stamped in every line of his face and his mien reflects experience, self-confidence, and power.

"No man possesses a stronger sense of justice, and his inflexible and rugged honesty at times veil a natural tenderness of heart and sympathetic nature. He does not know how to dissimulate. If a visit is untimely or he is bored, the discovery is easy, unless one is a fool. He is as methodical as he is punctual in his business and official relations, and some of his peculiarities arise from this fact. One of these I cannot refrain from mentioning. He

has a chair beside his desk to seat a visitor, the position of which is as unalterable as were the laws of the Medes and Persians. The rash mortal who disturbs it is certain of a rebuke, and perhaps will hear these words, with variation: 'That chair has stood there for ten years; put it back and sit down.'

"Of a nervous temperament and with an emotional element he is not swayed by impulse. His friendships are strong and sincere but not wasted. 'He does not wear his heart upon his sleeve.' His integrity is of so lofty a nature that he has no charity for rascals, though much tenderness and sympathy for the weaknesses of human nature. Positive by nature and in his convictions and opinions, he is also progressive and far from dogmatic, readily yielding his views to well-established facts. He was among the first to accept the mosquito theory, and, at a meeting of the American Medical Association which met here in 1903, administered a scathing rebuke replete with sarcasm to the doubting Thomases with views that were ossified.

"The rough edges which at times strike the uninitiated in the exercise of his functions as professor and dean, are as a ruffled surface of water suggestive but not dangerous. Beneath all is calm and the heart beats warm, tender and true. In his familiar relations he is hospitable, courteous and an agreeable host, and at social functions entertaining and brilliant with much wit and humor. An instance of the latter was related to me; a student approaching him asked, 'Is it true, Professor, that fish is a food for the brain?' 'Yes,' he replied, and, with a twinkle in his eyes, added, 'Now you may go and eat a whale.'

"Take him all in all, he is a grand old man, and we shall miss him at faculty meetings, more than words can express, and his place as teacher is not easy to fill. His mantle will prove weighty to bear and to uphold. The compliment he receives to-night in this great gathering to do him honor is the more timely and graceful as, in retiring, ties will be sundered, freighted with precious memories of the past. Ah! how sad are those old memories in the autumn when the leaves are falling and the sun is setting.

"Half a century's work engrossing life's energies cannot at once be abandoned without feelings of regret and sadness. Habits of life cannot be at once set aside without some struggle and pain.

In the hours of depression sure to follow, whilst the balance wheel of life adjusts itself to new conditions, let us hope the events of this day, amidst admiring and loving friends be recalled by him, to disperse the gathering shadows."

During the recital of Professor Lewis, Professor Chaillé often passed his hand before his eyes at the expressions of humor, of sincerity, of encomium and of hearty congratulation as it carried or touched his deeper feelings.

He arose finally and with a voice broken with emotion acknowledged the service of his friends in presenting him with the Jubilee. He confessed to years of service to the institution which had seen his best days of labor and finally delivered an address which is here reproduced:

Mr. Chairman, Ladies and Gentlemen: For more than fifty years the chief interest and the chief ambition of my professional life have been the maintenance and the improvement of the Medical Department, to which was chiefly due both the origin and the foundation of our University. This occasion, to commemorate the unprecedented length of my official career and to console me for the increasing disabilities of age, was unsought and undesired by me, but is profoundly appreciated. For, this occasion has forced me to realize, as I would not otherwise have done, how numerous and devoted are my friends and how great is their esteem. Whether the compliments paid are fully merited may be questioned, but the generosity of the regard and the fervor of the friendship that prompted the compliments cannot be questioned and have aroused vehement emotions of ardent gratitude.

My special and cordial thanks are due to every one of the speakers, not for my own sake alone, but also for the compliment paid, by their presence and their gracious words, to the Medical Department, the medical profession and the University. No compliment paid is more prized than is the mere presence of my highly valued friend, a visitor of a day, and for my sake, from his home in Washington, Prof. Geo. M. Sternberg, M. D., ex-Surgeon General of the United States Army, who as scientist, sanitarian, patriot and man of worth has no superior in the American medical profession. Another visitor of a day, from distant Kentucky, merits my affectionate welcome, Prof. Lewis S. McMurtry, ex-President of the American Medical Association, the only alumnus (1873) of our

college, but not its only professor, who has been thus highly honored, and who is distinguished among other things for his devotion to the advancement of the best interests of our profession. His presence emphasizes his interest in his alma mater and his regard for the last of his professors still living. Professors Lewis, McMurtry and Dyer, and Doctors Lemann and Talbot are representatives from 1862 to 1908 of the more than 3,400 medical graduates whom I have helped to educate. From no other source could appreciation of my professional services be more gratifying. The worthiest citizenship and the renowned professions of divinity, law and education, represented by my friends, the Rev. Dr. Warner, Justice Frank A. Monroe of the Supreme Court of Louisiana, and President E. B. Craighead of Tulane University have, by their public commendation of my services, won my lasting gratitude.

Exceptional thanks are due to his excellency Governor Sanders, and as cordial welcome to his delegate, Mr. St. Clair Adams, as awaited his principal had the heavy drain on the Governor's time permitted his presence in New Orleans. All of the medical and educational interests, represented on this occasion, derive from the presence and the complimentary address of the Governor's representative increased assurance of the Governor's friendly consideration.

Having very inadequately acknowledged my welcome obligations to the friends who have spoken in my behalf, I solicit attention to other considerations.

The improvements of the Medical Department during the twenty-three years that I have been its Dean have greatly exceeded those accomplished in all other periods of its history. For, since 1885, all previous records have been annually surpassed in one or more such important particulars, as in the increase of students; of revenue, of teachers, of laboratories and other educational advantages, and of requirements for admission and for graduation. So that a student to be graduated in 1908 has had many times greater advantages and must have acquired at least three times more knowledge than in 1885.

Any praise for these improvements is due, less to the Dean, than to the members of the faculty over which he has presided, for, without their cordial support and, usually, their initiative, the improvements could not have been executed. But neither the

present Faculty nor its Dean are willing that their greater success should serve to reflect unfavorably on their honored predecessors who have gone to "the undiscovered country from whose bourne no traveler returns."

From 1865 to 1885, Prof. T. G. Richardson was the Dean and the Medical Department never had a better nor an abler nor as serviceable a Dean. His colleagues were the eminent veterans, Professors Hunt, Stone and James Jones, the able and distinguished Professors Bemiss, Hawthorn, Joseph Jones and Logan, and the three senior members of the present Faculty, Professors Lewis, Elliott and Chaillé. All were as anxious and as able to accomplish improvements as the Faculty over which I have presided. Prevailing conditions, from the capture of New Orleans in 1862, to 1877, were so desperately unfavorable, because of the disastrous results of our civil war and of twelve years of outrageous "reconstruction" mis-government, that, during this long period of direct adversity and poverty, it exhausted the meager resources of the Faculty barely to maintain the imperiled life of the Medical Department. The Dean and members of the Faculty, prior to 1885, are entitled to as much gratitude and praise, for preserving the threatened existence of our college and for handing it down to their successors better equipped in 1885 than previously, as may be deserved by their more fortunate successors.

Louisiana was not rescued from the vilest misgovernment and restored to good government until 1877, but had been so despoiled and impoverished by fifteen disastrous years that it required many years to recuperate and the hope for prosperity was so long deferred that it was not until 1885 that the Medical Department began to experience renewed prosperity. It was my good fortune to be chosen Dean at this propitious time when that tide had begun which, taken at the flood, leads on to fortune. From 1885 to 1908 Southern prosperity has continually increased and with it the prosperity of the Medical Department. So that the annual revenue from students' fees has sufficed not only to maintain the college but also to contribute more and more every year to improvements.

Another great stimulus to progress was the wholesome development of a strong professional and public opinion, in favor of the improvement of medical education and, as an indispensable pre-

requisite thereto, the inauguration of many additional and expensive laboratories. The old building of the Medical Department was wholly inadequate for any additional laboratories and the great progress made by our college would have been impossible but for Professor Richardson's realization that a new building with the necessary laboratories was indispensable to the prosperity of the Medical Department. The most fortunate result was that Mrs. Richardson donated, in 1891, funds sufficient not only to erect a much more suitable building but also to equip its many excellent laboratories. Never was a gift more opportune, never one of like amount more promotive of medical education.

There too soon followed (1894) the death of our highly esteemed and very able colleague, Prof. Albert B. Miles, and with it his loving bequest of \$10,000, which has been expended only in part and most advantageously, chiefly to increase, with the increase of our students, the equipment of our laboratories and of our valuable library. There followed (1902) the \$800,000 bequest of the philanthropist, Mr. Alexander C. Hutchinson, due to the solicited advice of his trusted friend and my grateful pupil, faithful friend and distinguished colleague, Professor Rudolph Matas, M. D. From the Hutchinson Fund, the greatest ever yet bestowed on any Southern medical college, the Medical Department is yet to derive immense educational advantages and an increase of prosperity.

Thus, within eleven years (1891-1902) of my deanship, the Medical Department, which had never before received from any individual any notable contribution of money, was given nearly one million dollars, now of much greater value. These three notable gifts, to promote medical education, were derived in every instance directly or indirectly from members of the Medical Faculty, to whom Administrators and Faculty owe an unceasing debt of gratitude.

Another great good fortune has been mine, for I have presided over thousands of earnest, decorous and grateful students and over a Faculty of distinguished men, who have never been excelled in the goodwill that prevailed, in their unanimity of action and in the loyal and generous consideration unfailingly given to their Dean. Some of the chief reasons have now been stated why the Faculty, prior to 1885, was much less fortunate but not less meri-

torious than since 1885, when I became Dean, and why so many unprecedented improvements have since been executed.

Every member of the Faculty from 1885 to 1908 eagerly seized every favorable opportunity to develop his own special branch and succeeded to an extent best appreciable by one familiar, as I am, with the past and its unfavorable conditions. The greatest gratitude is due to my two oldest and dearest colleagues, with whom I have labored hand in hand for more than thirty years—Professors E. S. Lewis, M. D., and John B. Elliott, M. D.; to that most accomplished anatomist, my friend Prof. Edmond Souchon, M. D.; to my indefatigable and most devoted friends Professors R. Matas, M. D., and A. L. Metz, M. D., and to my friend Prof. J. T. Halsey, M. D., who has inaugurated two very valuable laboratories. Limitation of time does not permit me to name my exceedingly meritorious but more recent colleagues and the numerous highly esteemed demonstrators, lecturers and instructors who have served with me, but it is due to them to testify that most of them are old in service, that all of them have served ably and faithfully, that I do not believe any medical college has a more efficient corps of teachers, that the future of the Medical Department is safe in their hands, and that, to my great gratification, all, without one exception, are my faithful friends. I favored the selection of every one of them and the influence I have wielded, in securing the exceptional efficiency of our teaching and also of our non-teaching staff, is, in my opinion, one of the best services I have rendered.

Exceptional causes induce me to name one of my younger colleagues, he who is to succeed me as Dean, the present Associate Dean, Prof. Isadore Dyer, M. D. It is due to him to testify, that I favored the appointment of an Associate Dean and his selection; that he has given me very valuable aid; that neither a loving brother nor son could have given me more deferential or more generous consideration and that, in his tactful and judicious hands, supported, as he will be, by a very able Faculty and staff of teachers, the future of the Medical Department will be safe.

For the future's prosperity I have but one fear, the peril of debt, due to the laudable desire to hasten educational progress, and to the annual temptation to overestimate receipts and to underestimate expenses. Sad experience has forced on me a great hor-

ror of debt and taught that, in very many cases, it ultimately results in the delay and even in the ruin of the cause, however laudable, for which it was incurred.

Few live long enough to realize how sore a trial it is, for a lover of useful labor, to be deprived, by the increasing infirmities of age, of the habitual occupation of a lifetime. But exceptional consolations serve to soothe my distress. Having devoted my chief labor and love to my students, graduates, colleagues and associate teachers, it is a source of greatest consolation that they have returned an ample harvest of approbation. Some evidence of the devotion of my colleagues is manifest in the facts that, at three sessions following my sixty-fifth year, I, fearing that age might be impairing my usefulness, resigned and was forthwith unanimously re-elected; and that I warned the Faculty three years ago that, while my duties were annually increasing, my working capacity was decreasing, but that I would strive, if desired by the Faculty, to serve until the close of my fiftieth year of official service. My colleagues, in 1905, unanimously desired me to continue and, in 1907, not only my colleagues but all of my associates earnestly protested against my retirement.

Another great consolation is that I leave the Medical Department when its prosperity exceeds, in all particulars, that of all preceding years; when it has become one of the best equipped and best manned medical colleges in the United States and the best in the South; and when it is not only free of debt, as it has been for more than thirty years, but also has the greatest annual income and the greatest surplus in reserve ever accumulated; over \$10,000 from students' fees in addition to more than \$4,000 of the Miles' Fund and \$600,000 of the Hutchinson Fund.

I find an additional consolation in the flattering compliments paid me for my efforts to promote the welfare of the medical profession and the advancement of medical science, especially of that branch of it which teaches the prevention of disease and thereby contributes most to public health and the common weal. In the discharge of all of my duties I have striven to "gently scan my brother man, still gentler sister woman" and to give to my few foes, as freely as to my many friends, truth and justice.

I am encouraged to believe that I have succeeded, in greater measure than my knowledge of my own frailties led me to expect,

by the kind consideration given me by the Administrators and President of the University and by the Carnegie Foundation for the Advancement of Teaching; by the exceptional manifestations of esteem shown by this Jubilee and by the proposed Chaillé Memorial; by this evening's honored and eminent speakers in my behalf; and by the most generous and loving consideration given by all those with whom my life of labor has been most intimately spent. I shall close my official career, not merely without unkindness to anyone, but, on the contrary, with heartfelt thanks and grateful appreciation of the regard, esteem and affection that have been given me so generally and so generously.

If aught I have said has violated the modesty I greatly admire, at least in others, and has partaken of the boastfulness I detest, also especially in others, I beg to remind every one of you that your Bible justifies you in pardoning me, for this highest authority teachers: "Let not him that girdeth on his harness boast himself as he that putteth it off."

Louisiana State Medical Society Notes.

In Charge of the Publication Committee,

Dr. E. M. Hummel, Chairman; Drs. W. W. Butterworth and
M. H. McGuire.

OFFICERS, 1908.

President—DR. E. DENEGRE MARTIN, New Orleans.

First Vice-President—DR. J. B. HARGROVE, Natchitoches.

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Seventh Congressional District—DR. R. O. SIMMONS, Alexandria.

To the Members of the Louisiana State Medical Society,

GENTLEMEN: As you have seen fit to confer upon me the honor of being your President, an honor of which I am fully appreciative, and, as it comes without my solicitation, I feel that I am at liberty to call upon you for the assistance which I must have to carry on the work and make my incumbency in office a success.

The Society has made rapid advancement in the way of organization and the foundation of a successful career has been completed. The House of Delegates, which is now assured, can be put into effect at the next annual meeting. Thus completing the plan of organization, but not perfecting it. Let us work to attain this end at the earliest possible time. To do this, every member of the Society must lend his aid. I would suggest that every member constitute himself a committee of one to see that his local Society meets regularly; that every reputable physician in the parish becomes an active member and at the next meeting elect a delegate, to whom the affairs of his parish, as well as the State Society can be submitted.

I shall appoint the Standing and Special Committees as soon as possible, and I sincerely trust that the appointment will not fall to the lot of men indifferent to the honor.

Let us get busy and make our State Society the strongest and best medical organization in the country. It can be done, but only by a determined and energetic membership.

E. DENEGRÉ MARTIN, M. D.,
President.

Medical News Items.

THE DEDICATION OF THE NEW RICHARDSON MEMORIAL.—On May 19, at 3 p. m., as a part of the exercises of the concluding days of the Medical Department, the cornerstone of the New Richardson Memorial Building was laid. A large gathering of the several faculties of Tulane, of citizens, ladies and gentlemen, and representatives of the graduating class of the Medical Department, assembled on the lawn on the north side of the Gibson Hall, facing the new building. After divine invocation had been asked by Reverend J. D. LaMothe, of St. Paul's Church, Professor E. B. Craighead, in the name of the University, thanked the audience for its presence. He said that they had been assembled to listen to the address of the distinguished Dean of the Medical Department, Professor Stanford E. Chaillé. He regretted the absence of Mrs. Ida A. Richardson who had made the building a possibility. He paid a tribute to the benefactors of the University, men and women, who had stimulated education. He referred to the advances of medical science in the last fifty years and especially mentioned the recent changes in the Medical Department which had been made possible by the munificent bequest of the late Alexander C. Hutchinson. Professor Chaillé followed with a brief address in which, among other things, he said:

"Love, gratitude and reverence for the dead have expended incalculable sums of money for the memory of those most loved and distinguished in costly tombs, mausoleums and monuments, many of which have crumbled to dust or with time lost their significance. Whether moneys so expended yield best returns is a question. With the development of education, the nursery of civilization, men have realized that the memory of the dead can best be perpetuated by a memorial building devoted to relieving suffering. New Orleans has been particularly favored with many such memorial buildings, and thousands have been rescued from sickness and suffering or knowledge has been imparted by them. Tulane has been blessed with such benefactors as Tulane, Newcomb and Tilton. It is only in the past thirty years that the public has realized the great benefit of medical knowledge; many have realized too late that public health is the

most essential thing for happiness, that 'Public health is a nation's wealth.' Disease fosters immorality and crime. Medical science has reduced the death rate per annum for New Orleans to only about 7,000, whereas, with our present population under conditions that existed a century ago it would have been 20,000.

"No man advocated more strongly the necessity for the gaining and spreading of knowledge than Dr. T. G. Richardson. The benefits resulting from the noble gifts of Doctor and Mrs. Richardson have not only been realized by the Medical Department of Tulane, but by the whole South. Their generosity has inspired others, for it was followed in 1894 by the \$10,000 bequest of Dr. Albert D. Miles, who improved and vastly benefited the Charity Hospital, and in 1902 the great bequest of Alexander C. Hutchinson, who acted on the earnest solicitation of Dr. Matas and left a legacy of \$800,000 to the cause of medical science. In addition to the institutions mentioned we will soon have completed the Delgado Memorial and the Josephine Hutchinson annex."

Ex-Surgeon General G. M. Sternberg and Professor McMurtry of Louisville, Ky., who were present, were called upon for impromptu remarks and congratulated the city of New Orleans on having such liberal philanthropists.

As Dr. Chaillé was about to proceed to lay the cornerstone President Craighead stepped forward and presented him with a silver trowel, which had been donated by Contractor Glover. Dr. Chaillé accepted the trowel from Dr. Craighead upon the condition that when it had served its purpose he be permitted in turn to present it to Mrs. Richardson.

Dr. LaMothe then gave the benediction, after which the ceremonies of laying the stone continued, the Dean using the silver trowel and spreading the mortar. In the cornerstone a sealed metallic box was placed with the usual articles, such as coins, copies of the daily papers, etc. The stone bears the inscription, "Erected by the Administrators of the Tulane Educational Fund with funds donated by Ida A. Richardson, wife of Tobias Gibson Richardson of New Orleans, A. D. 1908."

After the laying of the cornerstone, representatives of the class of 1908 used the trowel to plant their class ivy at the corner of the new building with the idea of establishing this custom among succeeding graduates from the Medical Department as a tribute of

sentiment to the transplanted medical institution, the vines having been taken from the old building on Canal street.

TULANE COMMENCEMENT.—The graduating exercises of the Tulane University of Louisiana were held at the old French Opera House on Bourbon street in New Orleans on May 20. The exercises began at 10 o'clock a. m. promptly, and a large gathering of ladies and gentlemen completely filled the magnificent auditorium of this historic playhouse. Between 300 and 400 were seated on the stage, including the Board of Administrators, Faculties, graduates of all departments and guests. This was the first time in the history of the University that a joint commencement was held, and it proved to be a success in every way.

After the opening prayer of Rev. Charles L. Wells, Dean of Christ Church, Dr. E. B. Craighead, the President of the University, introduced Professor Henry Beach Carre, A. B., of the Faculty of Vanderbilt University, a graduate of Tulane of 1895. Professor Carre delivered an academic address which he entitled, "The Call of the Twentieth Century." It was full of magnificent antitheses, in which the militarism of the Middle Ages was contrasted with the development of industrialism at the present time. In beautiful metaphors he assumed the part of a pleader for humanitarianism and altruism. A considerable part of his address was spent in discussing the growing sentiment against gambling, the evils of trusts and the control of the liquor habit.

At the request of the President, Dr. V. Brandt Dixon, the head of the Newcomb College of Tulane University, announced that the suit of the Newcomb heirs against Newcomb College had been decided in favor of the College, and that after six years of litigation the Supreme Court of New York State had declared that the \$2,000,000 willed by Mrs. Newcomb would now become the property of Tulane for its Department of Women as soon as the formalities could be accomplished.

Dr. Craighead introduced Mr. J. B. Aswell, the Superintendent of State Education, who admirably compared Tulane University to the central power-house of a great electric system, the ramifications of which represented the secondary teaching institutions in the South. He made an earnest appeal for education and declared that Tulane occupied the central position as the University of the entire South and as such that it should be a thing of pride to

every citizen of the commonwealth. He particularly argued that as the pride of the State it should receive the support of the State.

Upon the conclusion of this address, the Deans of the several departments submitted the names of the graduates on whom the President formally conferred degrees. The following graduated from the Medical Department and the Department of Pharmacy:

Doctors of Medicine—Julio Aguilar (Soto), John Sylvester Dunn, Yves Ardoin, Robert Heath Foster, Leon Birdsong Austin, Henry Louis Fougereousse, Charlie Davenport Baker, James Frank Gladney, Earlie Adam Benbow, Frank Raymond Gomila, Thompson Mitchel Berry, Vincent Jones Gragg, Albert Fitzhugh Beverly, William Flournoy Griffin, Jr., Frank Teeple Blow, John Ewell Hall, Eugene Francois Brindjone, Thomas Deveau Hall, Enoch McLain Causey, Aaron Ross Hays, Robert Hall Chilton, Miller Craft Henry, LeRoy Akron Cockfield, William Preston Hickman, Christian Grenes Cole, Felix R. Hill, Irwin Edward Colgin, Sidney Gilbert Hines, James Weaver Conley, David Isaac Hirsch, Edmund McCollam Connely, Sterling Price Holland, William Wallace Coulter, Sidney Paul Israel, Sylvester Douglas Craig, Harry Jenkins, Ambrose Burdett Crain, Benjamin Franklin Johnson, Jr., William Hilliard Cryer, Ray Lynn Jones, Edgar William Daly, Thomas James Kay, John Spencer Davis, Nathaniel Mitchell Kenney, Edward Joseph DeBergue, George Carleton Kilpatrick, Robert Francis Derouen, Francis James Kinberger, Robert Austin Duncan, Frank Eugene Lamothe, James Frederick Dunn, Jerome Emanuel Landry, Louis Levy, Joseph Hoy Sanford, Arthur Dillard Harmon Little, Leo Saporito, Thomas Francis Long, Robert D. Schimmelpfennig, Layton Allan Love, Harry Walker Scofield, Benjamin Abner McClelland, Benjamin Franklin Smith, Rozell McGlathery, Amasa Dorman Stollenwerck, William T. McNeese, Edward Frank Stroud, Fergus O. Mahony, Paul Tilman Talbot, Clarence Prentice May, John Littlelie Tarlton, Laurent Obid Miller, John Allen Thames, Alexander Dowsing Mims, Samuel DuBose Townsend, Andrew Dominick Mouledous, Albert Valentine Veazie, Henry Tecle Nicolle, William Charles Vickers, Guy Leory Odom, Ransom Russell Welch, John Tolson O'Farrall, Jr., Albert Edwin White, William Robert Orr, David DeWit White, Charles Wheelles Patterson, Clarence Ray Williams, Wil-

liam Thomas Patton, Harry Eugene Williams, Jr., Robert Emory Peebles, August Henry Willis, Joseph Camp Phillips, Roy DeLisle Wilson, Jessee Ullman Reaves, Robert Blanks Winn, Samuel Lyttleton Robertson, James Ira Woodward, George Fredric Roeling, William Alram Woody, Charles Stephen Roger, Brown Word, Edgar Lee Sanderson, Luther Archibald Youngs.

Master of Pharmacy—Frederick Andersen, Frank Teeple Blow, Isedor Braun, Adolphe Dumser Capdau, William Leo Childs, Jacob Sloman Cohen, Ambrose Burdett Crain, George Augustus Cronan, John Spencer Davis, Henry Andrew Di Trapani, Henry Louis Fourgerousse, Wirt Dee Fowler, Sterling Price Holland, Henry Arthur Johnston, Theodore LeBlanc, Arthur Johnston Harmon Little, William Alvin Love, Harry Mackie Ricketts, Peter John Rupp, Clarence Eggleston Stiefel, Robert Bruce Wallace, Dandridge Payne West, Albert Edwin White, James Ira Woodward.

THE NATIONAL VOLUNTEER EMERGENCY SERVICE, instituted in 1900, has recently been reorganized by the election of Dr. James Evelyn Pilcher, the distinguished editor of *The Military Surgeon*, as its Director General, and Dr. F. Elbert Davis, of New York, as its Adjutant General. The Medical Corps will consist of physicians, with rank from Lieutenant to Colonel, according to length of service, to whom are afforded special opportunities for emergency training. Full details regarding the Service and its work may be obtained by addressing Director General Pilcher at Carlisle, Pa.

CHANGES IN NORTHWESTERN UNIVERSITY MEDICAL DEPARTMENT.—Dr. John B. Murphy has resigned as Professor of Surgery and co-head of the Department in Rush Medical College and has accepted the Professorship of Surgery and head of the department in Northwestern University Medical School and position of attending surgeon at Mercy Hospital.

Dr. A. W. Meyer of the University of Minnesota and formerly of Johns Hopkins has accepted the professorship of Anatomy in Northwestern University Medical School.

Dr. A. N. Richards of the College of Physicians and Surgeons of New York City has been appointed professor of Pharmacology in Northwestern University Medical School.

NOTES ON MEDICAL EDUCATION.—In reporting the meeting of the Council on Medical Education the Secretary summarizes these items among others: There are 335 medical colleges in the civilized world; 161 of these are in the United States. There are no proprietary schools in Europe and the United States is the only leading nation which requires no preliminary education in physics, chemistry and biology at all of its medical colleges. The number of colleges listed by the Council on Medical Education as under 50 per cent grade and unsatisfactory totals 39. Thirty-two universities offer a combined course for the baccalaureate and M. D. degree in six years. Fifty-three colleges have adopted one or more years of work in physics, chemistry and biology in 1910 or before. Thirty-four states have reciprocal relations with other states.

ANNUAL MEETING OF THE STATE PHARMACISTS.—The 26th annual meeting of the State Pharmacists was held in New Orleans, May 12. The sense of the meeting was that the National Food and Drug laws were sufficient to serve the interests of this state and a resolution, calling upon the Legislature to take from the State Board of Health the framing of the Pure Food Law and place it in the hands of a commission, was passed.

THE NEW ORLEANS COLLEGE OF DENTISTRY GRADUATED 34 students on May 12. Dr. Isadore Dyer delivered the annual address at the Tulane Theatre. The dean, Dr. A. G. Friedrichs, considers this class excellent.

AT THE THIRTEENTH ANNUAL MEETING OF THE LOUISIANA STATE DENTAL SOCIETY on May 13, fifty delegates from the state were entertained by the Odontological Society by an enjoyable banquet at the Old Hickory restaurant.

THE PHYSICIANS AND SURGEONS OF THE ARMY AND NAVY.—But a very small number of those who served in the medical and surgical department of the Confederate army and navy still survive. Their association will meet during the reunion of Confederate Veterans in Birmingham, Ala., in June, 1908.

COMMENCEMENT EXERCISES AT MOBILE.—The forty-second annual commencement exercises of the Medical Department of the University of Alabama, which were held on May 1, were the most

successful in the history of the institution. The orator of the evening was Gov. Comer, who, as president of the Board of Trustees of the University, delivered a very interesting address to the students. The President of the University, the dean of the Faculty, also made addresses. The degree of Medicine was awarded to twenty-seven graduates; and the Degree of Pharmacy to four graduates. Announcement of hospital appointments followed the awarding of degrees and the evening was concluded by a banquet given by the Alumni of the University of Alabama and participated in by the graduation class, faculty and their guests.

SURGEONS OF SOUTHERN RAILWAY.—The thirteenth annual convention of the Association of Surgeons of the Southern Railway and allied lines was completed on April 30. Jacksonville, Fla., was chosen as the next place of meeting. The following officers were elected: Dr. B. G. Copeland of Birmingham, President; Dr. H. G. Bahnson of Winston-Salem, N. C., First Vice President; Dr. J. H. Shorter of Macon, Ga., Second Vice President; and Dr. J. U. Ray of Woodstock, Ala., Secretary-Treasurer. Several interesting papers were read and discussed at the last session of the convention.

IN LINE WITH THE ABOVE, Dr. E. D. Martin of New Orleans, Chief Surgeon of the Queen and Crescent Railroad Company, is organizing the surgeons of the company into an association of railway surgeons. The first meeting will be held in New Orleans in the early part of June. There will be two business sessions and a banquet at night. All of the surgeons are heartily in accord with the movement and from present indications every surgeon will attend.

PERSONALS.—Brigadier-General George M. Sternberg, U. S. A., retired, former Chief Surgeon of the Army, made a special trip to New Orleans, coming all the way from Washington, to take part in the ceremonies commemorative of Dr. S. E. Chaillé's golden jubilee. Dr. Lewis S. McMurtry, of Louisville, also came to participate, delivering one of the addresses.

Dr. Paul DeVerges was elected President of the Alumni Association of the New Orleans College of Dentistry.

The Governor has made the following appointments: Dr. E. Otis Egerton, coroner of Bienville, vice B. H. Nelson, resigned.

Dr. William T. Patton entertained the internes of Charity Hospital at a banquet at Galatoire's to celebrate their final meeting after two years of constant association.

The JOURNAL acknowledges the invitation to the graduating exercises of the Detroit College of Medicine, May 28.

Dr. J. M. Batchelor was elected President of the Charity Hospital of Louisiana Alumni Association at the annual meeting in May.

Dr. Henry W. Wickes, Passed Assistant Surgeon, U. S. A., has come to New Orleans from New York for the purpose of relieving Dr. Robert L. Wilson.

Dr. and Mrs. Arthur W. DeRoaldes have sailed for Europe for the summer.

Dr. M. R. McAlpin has moved from Leesville to Hinston, La.

Drs. A. S. and E. Kiblinger have gone to Alexandria; they were formerly located at Plancheville, La.

CLIPPINGS.—The Charity Hospital has acquired more room on Gravier street by expropriation proceedings.

There were 237 applicants before the Medical Examining Board in Mississippi in May and 110 passed.

The Memphis Hospital and Medical College at its 28th annual commencement graduated 82 students.

The Tulane-University graduated 102 in Medicine, 24 in Pharmacy and 22 in Law at its commencement on the 20th of May.

The Atlanta School of Medicine graduated a class of 49 on April 22.

MARRIED.—On May 3, 1908, Dr. J. P. Oneal of Marthaville, La., to Miss Eloise Youngblood of Mansfield.

DIED.—On April 27, 1908, at his residence in Homer, La., Dr. Charles H. Griffin, aged 68 years. Dr. Griffin was a graduate of the Tulane Medical Department in 1867. He was Captain in the 31st Louisiana Regiment in the Civil War. Honorary member Claiborne Parish Medical Society.

On April 30, 1908, Dr. J. F. Griffin, one of the oldest physicians of Shreveport, died, aged 80 years. The doctor was born in Louisville, Ky., in 1827 and for sixty years he has practiced medicine,

graduating in 1848 from the Louisville State University. The doctor was well known as a writer, and during the reconstruction days was the editor of the *Southern Cross*, published in Avoyelles Parish. At the time of his death the doctor was president of the Shreveport Medical Society.

On May 9, 1908, Dr. Louis L. Heintz, aged forty years, died at Marion, Ark. The doctor was originally a native of New Orleans, but after graduating at Tulane University he went to Memphis. After remaining in Memphis for twenty years he went to Marion, Ark., to practice medicine. The doctor was sheriff of the county at the time of his death.

On Saturday, May 17, 1908, Dr. R. O. Marcour, aged 34 years, a native of New Orleans, died in this city.

OBITUARY.—Dr. Thomas Edgar Schumpert died in Shreveport, at the Shreveport Sanitarium, of typhoid fever, on May 16, 1908, at the age of forty-five. Dr. Schumpert was one of the best known surgeons in the State and had been identified prominently with the profession in Shreveport for a number of years. He graduated from the University of Louisville in 1888 and for a number of years was identified with the Shreveport Board of Health. In 1902 he was elected President of the Louisiana State Medical Society, of which he was always a prominent and enthusiastic member. As surgeon for the various railroads entering Shreveport and as operating surgeon at the Shreveport Charity Hospital, as well as the Shreveport Sanitarium, which he founded, he was well and favorably known.

To perpetuate his memory he donated to the Sisters of Charity the present Shreveport Sanitarium, which is valued at \$50,000, and after making a number of other bequests he gave them the residue of his estate, which will amount to something in the neighborhood of \$75,000. To this the Sisters are to add \$100,000, by agreement, and some time in the near future Shreveport will have an up-to-date Schumpert Memorial Sanitarium.

As a citizen he was a man of judgment and ability as evidenced by his association with many enterprises in his city of adoption.

The JOURNAL expresses the feeling of bereavement of the entire profession in uttering its condolence to his grieving friends and family.

Puplications Received.

J. B. LIPPINCOTT CO., Philadelphia and London, 1908.

Glimpses of Medical Europe, by Ralph L. Thompson, M. D.

The Diseases of Children, edited by M. Pfaundler, M. D., and A. Schlossman, M. D., English translation edited by Henry L. K. Shaw, M. D., Linnaeus LaFetra, M. D. With an introduction by L. Emmett Holt, M. D. In four volumes—I, II, III and IV.

Practical Life Insurance Examinations With a Chapter on the Insurance of Substantial Lives, by Murray Elliott Ramsay, M. D.

International Clinics. Vol. I. 18th Series. 1908.

P. BLAKISTON'S SON & CO., Philadelphia.

The Opsonic Method of Treatment, by R. W. Allen, M. B., B. S. (London).

Lectures on Diseases of the Nervous System. (Third Series.) *The Borderland of Epilepsy*, by Sir William R. Gowers, M. D., F. R. C. P., F. R. S.

YEARBOOK PUBLISHERS, Chicago, 1908.

Practical Medicine Series. Head. Vol I. *General Medicine*. Billings-Salisbury. Vol. II. *General Surgery*. Murphy. Series 1908.

LEA & FEBIGER, Philadelphia and New York, 1908.

Diseases of the Nose, Throat and Ear, Medical and Surgical, by William Lincoln Ballenger, M. D.

MISCELLANEOUS.

Proceedings of the Twenty-Eighth Annual Session of the Louisiana Press Association Held at Lafayette, La., April 30, May 1 and 2, 1907.

Thirty-Fourth Annual Report of the Medical Director of the Cincinnati Sanitarium for the Year Ending November, 30, 1907.

Bulletins of Tulane University of Louisiana, March, April and May, 1908.

Announcement of the Ashville-Biltmore Sanitarium.

U. S. Department of Agriculture. Bureau of Plant Industry. *Bulletin No. 121*. Part II. *Mountain Laurel, a Poisonous Plant*, by Albert C. Crawford, issued Feb. 20, 1908. Part IV. *The Sources of Arsenic in Certain Samples of Dried Hops*, by W. W. Stockberger; issued Feb. 21, 1908. (Government Printing Office, Washington, D. C.)

U. S. Department of Agriculture. Forest Service. Circular 140. *What Forestry Has Done*, by Treadwell Cleveland, Jr. (Government Printing Office, Washington, D. C.)

Annual Report of the Bureau of Health for the Philippine Islands for the Fiscal Year Ending June 30, 1907. P. A. S., U. S. P. H. and M. H. S. Victor G. Heiser, M. D., Director. (Manila Bureau of Printing, 1907.)

Thirty-First Annual Report of the Board of Health of the State of New Jersey, 1907, and Annual Report of the Bureau of Vital Statistics. (John L. Murphy Publishing Co., Printers, Trenton, N. J., 1908.)

Letter from the Third Assistant General Containing a Discussion of the Policy of the Post Office Department Regarding Second Class Mail Matter, and an Explanation of Its Purpose in Issuing Order 907 Amending the Regulations Pertaining Thereto. February 15, 1908. (Government Printing Office, Washington, D. C., 1908.)

An Inquiry Into the True Meaning and Intent of the Postal Laws Relating to the Public Press, by Wilmer Atkinson.

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MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Report of the Board of Health of the City of New Orleans.
FOR APRIL, 1908.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	3	1	4
Intermittent Fever (Malarial Cachexia)	1	1	2
Smallpox.....		4	4
Measles	6		6
Scarlet Fever.....	2	2	4
Whooping Cough		3	3
Diphtheria and Croup.....	2		2
Influenza	2	1	3
Cholera Nostras		4	4
Pyemia and Septicemia	3	1	4
Tuberculosis.....	36	42	78
Cancer.....	12	5	17
Rheumatism and Gout	2	2	4
Diabetes	1	1	2
Alcoholism	2	1	3
Encephalitis and Meningitis.....	17	5	22
Locomotor Ataxia.....	1		1
Congestion, Hemorrhage and Softening of Brain.....	9	7	16
Paralysis	2	2	4
Convulsions of Infants	3	3	6
Other Diseases of Infancy	28	16	44
Tetanus	1	4	5
Other Nervous Diseases			
Heart Diseases	40	32	72
Bronchitis		6	6
Pneumonia and Broncho-Pneumonia.....	16	30	46
Other Respiratory Diseases			
Ulcer of Stomach.....		1	1
Other Diseases of the Stomach	5	8	13
Diarrhea, Dysentery and Enteritis.....	118	49	167
Hernia, Intestinal Obstruction.....	3	1	4
Cirrhosis of Liver.....	9	3	12
Other Diseases of the Liver	1	3	4
Simple Peritonitis	2		2
Appendicitis	5	1	6
Bright's Disease	36	14	50
Other Genito-Urinary Diseases.....	7	1	8
Puerperal Diseases	6	2	8
Senile Debility.....	14	8	22
Suicide	7	1	8
Injuries.....	29	17	46
All Other Causes.....	20	5	25
TOTAL.....	451	287	738

Still-born Children—White, 18; colored, 14; total, 32.

Population of City (estimated)—White, 258,000; colored, 93,000: total, 351,000.

Death Rate per 1000 per annum for Month—White, 20.98; colored, 37.00; total, 25.23.

METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure 29.98
Mean temperature 74.
Total precipitation 1.34 inches.
Prevailing direction of wind, southeast.

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